

SYLLOGE FUNGORUM

OMNIUM HUCUSQUE COGNITORUM

DIGESSIT

P. A. SACCARDO

VOL. XXII.

Sectio I.

SUPPLEMENTUM UNIVERSALE

Pars IX. - Sect. I.

Pag. 1 ad pag. 822 16 DEC.

Ascomycetæ

(editæ usque ad finem anni MCMX)

AUCTORIBUS

P. A. SACCARDO ET ALEX. TROTTER

Neminem latet, Sylogen nostram diagnoseon collectionem ordinatam, non vero [nisi in observatis propriis] opus criticum sistere. Hoc faciant monographi et floristæ et benevoli meminerint, quid vere sit Syloge nostra, ne nobis tribuant errores, qui nostri non sunt.

Syll. Fung. V (1887) in præmonitu.

Published by
J. W. EDWARDS

Lithoprinted by
EDWARDS BROTHERS, INC.
ANN ARBOR, MICHIGAN

1944

PATAVII

Die XX Augusti MCMXIII — Sumptibus P. A. SACCARDO
TYPIS SEMINARII

SUMMA FUNGORUM HUCUSQUE COGNITORUM

Species in voluminibus I-XVIII descriptæ	57,660
Species in voluminibus XXI et XXII descriptæ	8,955
Species fungorum in toto opere descriptæ	66,615

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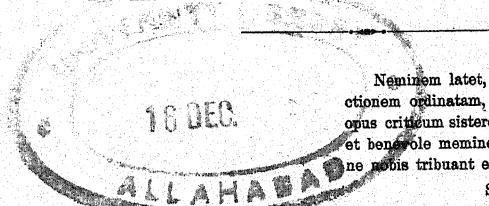
Pars IX.

Ascomycetæ - Deuteromycetæ

(editæ usque ad finem anni MCMX)

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Fol. 101 — Pretium it. lib. (francs) 101

PATAVII

Die XX Augusti MCMXIII — Sumptibus P. A. SACCARDO
YPIS SEMINARI

98772

EGREGIIS VIRIS

CH. B. PLOWRIGHT (1849-1910)

ANGLO

RUD. ADERHOLD (m. 1907), MAX BRITZELMAYR (1838-1909)

JULIO KÜHN (1825-1910), RUD. HESSE (1844-1912)

GUST. HERPELL (m. 1912)

GERMANICIS

FR. X. GILLOT (1842-1910), LEONI MARCHAND (1833-1911)

ED. BORNET (1828-1911), LEONI ROLLAND (1842-1912)

JULIO DE SEYNES (1837-1912), ED. GRIFFON (1869-1912)

L. CRIÉ (m. 1912), JULIANO GODFRIN (m. 1913)

GALLICIS

JULIÆ COM. TURCO-LAZZARI (1848-1912)

ITALICÆ

A. P. MORGAN (1836-1908)

BOREALI-AMERICANO

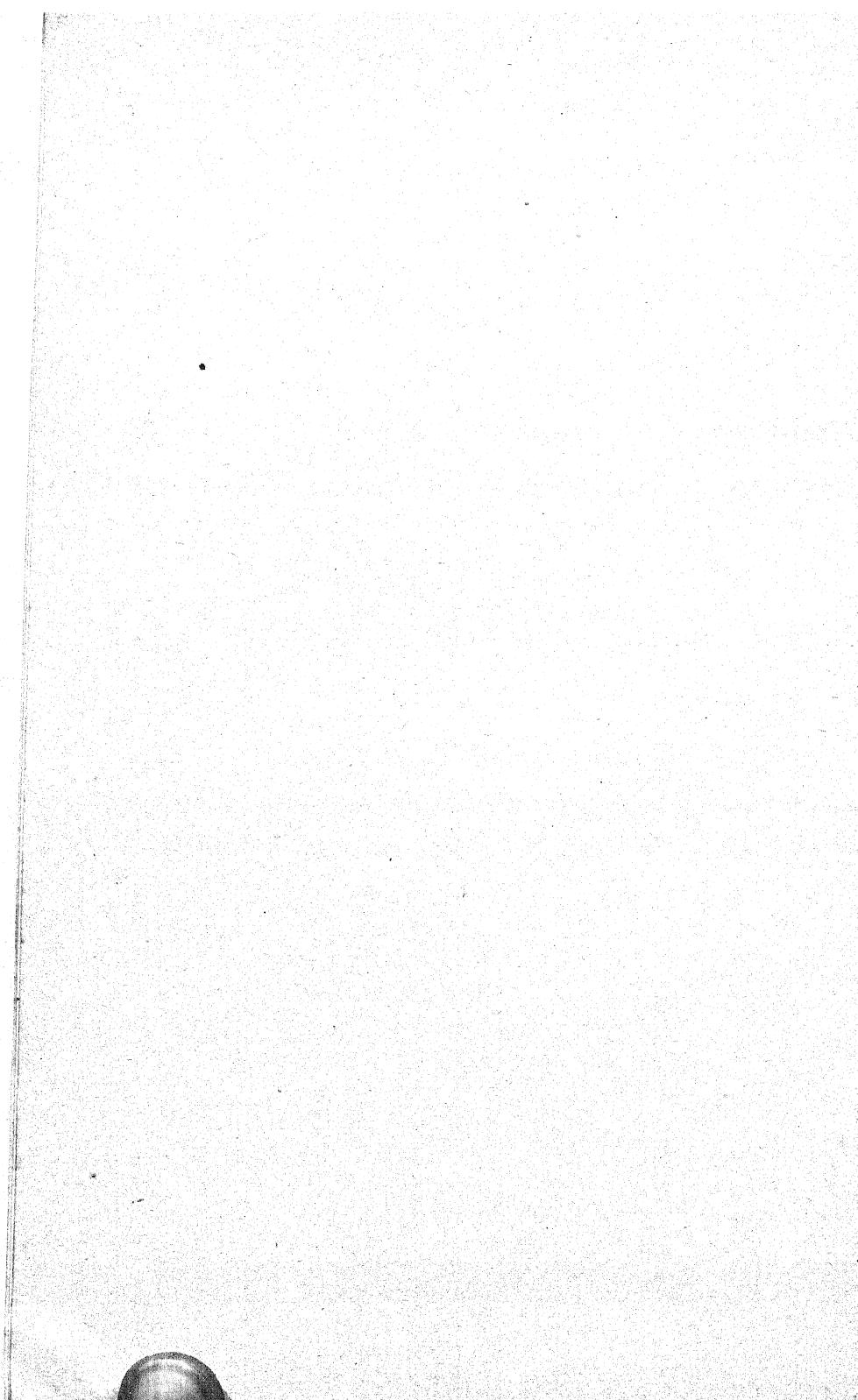
DE SCIENTIA MYCOLOGICA BENEMERENTIBUS

QUINQUENNIO ULTIMO DEMORTUIS

VOLUMEN HOC

DICANT

P. A. SACCARDO ET AL. TROTTER



LABOULBENIOMYCETÆ Peyr. (*)

Syll. VIII p. 909, IX p. 1130, XIV p. 725, XVI p. 674, XVII
p. 915.

Conspectus tribuum, subtribuum et generum Laboulbeniomycetum
sec. Thaxt. Monogr. Laboulb. II (1908) p. 236-239.

- | | | |
|----|---|----------------------|
| 1 | Antheridia ex cellulis specialibus v. cellularum aggregationibus specialibus formata. | LABOULBENINÆ 80 |
| 2 | Antheridia composita; cellulæ antheridiales endogenæ e cellula una v. pluribus intercalaribus formata et intra et ab communi loculo evacuantia (subinde libera sed compacta in <i>Distichomycete</i>). | PEYRITSCHIELLACEÆ 35 |
| 4 | Individua unisexualia | DIMORPHOMYCETÆ 7 |
| 5 | Perithecia ex axe primario verticali v. obliquo oriunda. | Dimeromyces 6 |
| 6 | Perithecia ex uno v. pluribus axibus secundariis cellula subbasali suffultis oriunda. | Dimorphomyces |
| 7 | Individua hermaphrodita; appendices steriles 1-cellulares basi atratæ. | 20 |
| 8 | Antheridium liberum a receptaculo. | RICKIEÆ 11 |
| 9 | Cellulæ antheridiales poro communi evanquantes. | Rickia 10 |
| 10 | Cellulæ antheridiales demum liberæ sed aggregatæ. | Distichomyces |
| 11 | Antheridium receptaculo ex toto v. partim adnatum. | PEYRITSCHIELLEÆ 18 |
| 12 | Receptaculi cellulæ supra cellula basali seriatæ. | |

(*) Ill. prof. THAXTER anno 1908 in lucem protulit mirabilis et magni ponderis monographiæ Laboulbeniacearum partem alteram, cuius eximias icones in Syll. vol. XIX-XX citari curavimus. Hic tantum utilem prospectum generum ex eadem monographia traducimus et tantum brevissimas notas de generibus et speciebus novis referimus. Cfr. Syll. XIV, p. 725.

- 2 Laboulbeniomycetæ.
- 13 Perithecia omnino libera. 16
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- 15 Receptaculi series subterminalis antheridium singulum laterale ferens. **Peyritschiella**
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- 18 Antheridium ad basim appendiculum; supra pedicellum adsunt binæ cellulæ superpositæ. **Chitonomycetes** 19
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- 22 Antheridium evacuans inter cellulas quaternas appendiculatas. **MONOICOMYCETÆ** 25
- 23 Cellulæ antheridiales in 4 paria opposita dispositæ. **Monoicomycetes** 24
- 24 Cellulæ antheridiales copiosæ. **Eumonoicomycetes**
- 25 Antheridium per porum liberum dehiscens. **HAPLOMYCETÆ**
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- 27 Antheridium terminale, rotundatum, areolatum, poro lateralí spinaque terminali præditum. **Haplomyces** 28
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- 29 Cellulæ antheridiales cum cellulis sterilibus supra cellulam pedicelli appendicis aggregatæ. 30
- 30 Cellulæ antheridiales numerosæ, in oblique superpositas series dispositæ, cum cellula sterili marginali sociatæ, poro apicali. **Eucantharomyces** 31
- 31 Antheridium poro lateralí dehiscens infra partem cellulosam terminalem sterilem. **Cleidiomyces** 32
- 32 Cellulæ antheridiales paucæ dehiscentes in loculum supra cellulas binas externas extensum usque ad loculum terminalem et porum. **Euhaplomyces** 33

Laboulbeniomycetæ.

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- 33 Antheridium areolatum, laterale infra steriles ramulos terminales. **Cantharomyces**
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- 35 Antheridia ex cellulis singulis, tubulis efferentibus liberis præditis efformata. **LABOULENIACEÆ**
- 36 Individua unisexualia. **42**
- 37 Perithecia receptaculis secundariis hospiti immediate hærentia. **HERPOMYCETEÆ**
- 38 Perithecia e receptaculo primario oriunda. **Herpomyces 38**
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- 40 Receptaculum in prominentiam bicellularem desinens; sporidia 1-septata. **Dioicomyces 41**
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- 42 Individua hermaphrodita; receptaculum primarium processu secundario carens (ex evolutione intercalari). **75.**
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- 45 Cellula subterminalis appendicis sterilis, cellula infra posita antheridia plura gerens, terminalis cellula anteridium unicum spinosum gerens. **Acompsonmyces 46**
- 46 Appendix ex cellulis pluribus applanatis irregulariter superpositis constans, apice processu cupuliformi aucta; cellulis ascogenis valde copiosis (*Incertæ sedis* v. n. 34). **Polyascomyces 47**
- 47 Appendix antheridialis quinquecellularis; bina antheridia superposita e cellula terminali et subterminali orientia. **Acallomyces 48**
- 48 Pars distantior fertilis appendicis constans ex duabus v. pluribus cellulis superpositis, quæ exerunt antheridia in seriem singulam v. duplēm disposita. **Stigmatomyces 49**
- 49 Antheridia plus v. minus distincte verticillata in parte terminali fertili appendicis **Arthrorrhynchus**

- 50 Appendices antheridiales v. rami 2-plures cum ramis sterili-
bus ramulisque sociati.
- 51 Receptaculum, proliferationis ope; extremitate multicellulare,
ceteris cellulis copiose appendiculatis. 58
- 52 Appendix primaria cellularum superpositarum ramulos anthe-
ridiales extus superpositos exerens; ramuli similes e cellulis
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Idiomyces 53

- 53 Appendices primariæ nullæ matura ætate.
- 54 Receptaculum obconicum, cellulæ proliferæ exerentes extremi-
tate fasciculum densum appendiculum, basim pedicelli peri-
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- 55 Rami steriles pauci, cellulæ antheridiales intercalariter in se-
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- 56 Rami ramulique steriles copiosi, cellulæ antheridiales liberæ,
extus in series irregulares superpositæ ad ima appendiculum
segmenta, cum cellulis sterilibus rostellatis sociatae.

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- 57 Receptaculum subtriangulare, appianatum, processibus binis
bicellularibus peritheciisque binis sociatum, cellulæ proliferæ
supra basim appendices copiosas ramosas exerentes.

Diplomyces

- 58 Receptaculum e cellulis binis superpositis constans, superior
gignens appendicem plus v. minus distinctam primariam
nec non unum v. plura perithecia pedicellata 68
- 59 Rami antheridiales exerentes antheridia serialiter intercalaria.

CORETHROMYCETEÆ

- 60 Appendices primariæ hyalinæ e cellula basali ramulos gignen-
tes, perithecia secundaria efformata æque ac primaria.
- 61 Appendices primariæ plus v. minus atratæ, earum cellula ba-
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Corethromyces

- 62 Antheridia libera, singula v. aggregata in appendicibus vel
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stans, superior gerens seriem ramorum e quorum basi oriun-
tur ramuli antheridia singula v. aggregata proferentes.

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- 64 Appendix constans e cellulis pluribus superpositis extima ramos steriles gerens, basalis s^ape perithecia gignens, ceteræ ex angulo superiore emittentes ramulos breves antheridiales. **Stichomyces** 65
- 65 Appendix constans e cellulis numerosis superpositis, cellula basalis libera sterilis et specialis, ceteræ extus series ramulorum superpositorum gerentes, quorum cellula basalis antheridia singula v. aggregata gignunt. **Rhizomyces** 66
- 66 Appendix constans e cellulis superpositis, cellula basalis adnata, sterilis æqualis, ceteræ introrsum appendiculatæ, ramuli antheridia plus v. minus irregulariter proferentes. **Sphaleromyces** 67
- 67 Appendix bicellularis, cellula extima atrata proferens ramulos steriles et antheridiales. **Ceraiomyces**
- 68 Receptaculum multicellulare, ex cellulis subbiseriatis supra cellulam subbasalem sitis constans, altera series in perithecium terminata, altera in appendices. **Laboulbenia**
- 69 Receptaculum axes unum v. plures peritheciros secundarios liberos gerens.
- 70 Axis primarius dimotus a secundario singulo, plus v. minus elongato, multicellulari, chætophoro atque perithecium subterminale gerente. **RHACHOMYCETÆ**
- Rhachomyces 71
- 71 Receptaculum constans ex axe biseriato-multicellulari peritheciero, axesque lateraliter similes, quoque peritheciros proferens. **CLEMATOMYCETÆ**
- Clematomyces 72
- 72 Axes peritheciroi unicellulares, extreme appendiculati infra pedicellos peritheciales. **COMPSOMYCETÆ**
- 73 Individua solitaria ramis subverticillatis fertilibus et sterilibus, ex receptaculo bicellulari. **Compsomyces** 74
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- 75 Receptaculum indeterminatum v. divisionis secundariæ cellularum ope prolongatum.
- 76 Appendix primaria constans ex axe definito cellularum superpositarum (cfr. quoque n. 84). **79**
- 77 Receptaculum et primaria appendix axem cellularum superpositarum setiformem formantia, ramos, perithecia et ulte-

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- 78 Receptaculum ob secundarios processus versiforme, ramulos nullos infra perithecia gerens. **ECTEINOMYCETEÆ**

Ecteinomycetes

- 79 Appendix primaria constans ex prominentia subrotunda cellulari prope perithecium, ramulis terminalibus evanescentibus (*incertæ sedis*). **MISGOMYCETEÆ**

Misgomyces

- 80 Antheridia ex cellulis non v. parum mutatis appendicium v. eorum ramis formata. Species plerumque aquatica. **CERATOMYCETINEÆ**

- 81 Receptaculum contextu multicellulari compacto carens. 90

- 82 Receptaculum infra perithecia nullas appendices gerens. **CERATOMYCETEÆ** 89

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- 84 Perithecium determinatum paucicellulare Hydrophilomyces 85

- 85 Perithecium indeterminatum pluricellulare. **Rhynchophoromyces**

- 86 Receptaculum determinatum. 87

- 87 Perithecium determinatum paucicellulare. Autoicomyces 88

- 88 Perithecium pluricellulare. Ceratomyces

- 89 Receptaculum gerens appendices e cellulis specialibus infra perithecia sitis formatas. **COREOMYCETEÆ**

Coreomyces

- 90 Receptaculum contextu multicellulari compacto formatum. **ZODIOMYCETEÆ**

- 91 Receptaculum apice cupulatum, margine ciliato perithecia copiosa amplectente Zodiomyces 92

- 92 Receptaculum constans ex axe compacto, continuo cum appendice primaria apice appendiculata atque perithecia appendicesque lateraliter dense seriata gerens. Euzodiomyces 93

- 93 Receptaculum constans ex axe compacto, continuo cum appendice primaria apice appendiculata, quæ constat ex numerosis seriebus superpositis, quarum extima lateraliter gerit ramos peritheciros pluricellulares. Cainomyces

DIMEROMYCES Thaxt. — Syll. XIV p. 725, XVI p. 674, XVII p. 915.

1. **Dimeromyces minutissimus** Thax., Proceed. of the Am. Acad. 3322 vol. XLI, n. 11 (1905) p. 304, Monogr. Laboulb. II, pag. 242, t. 29, f. 6-9.

Hab. in superficie rhabditis *Labiæ minoris*, Cambridge Mass. Amer. bor. — Long. totalis usque ad apicem peritheciæ 50 μ .; appendices longiores 40-50 μ .; perithecia 34 \vee 10.

2. **Dimeromyces Labiæ** Thax., Proceed. of the Am. Acad. vol. XLI, 3323 n. 11 (1905) p. 303, Monogr. Laboulb. II, p. 242, t. 29, f. 1-5.

Hab. in elytris *Labiæ minoris*, Cambridge Mass. Amer. bor. — Long. tot. ad apicem peritheciæ 65-75 μ .; perithecia 50-60 \vee 12; sporidia 18 \vee 12.

3. **Dimeromyces falcatus** Paoli, Nuovi Laboulb. parass. di Acar. in Redia VII (1011) p. 292, t. XII, f. 8-9-9*.

Hab. in Acaro *Canestrinia dorecicola* parasitica in *Pentodonte punctato* prope Pisas Ital. centr. — Longit. receptaculi usque ad basim peritheciæ 50-51 μ .; perithecia 17-19 μ . lata; appendix inf. 80-94 μ . long., super. 53-60 (dempta utriusque cellula basali).

4. **Dimeromyces muticus** Paoli, Nuov. Laboulb. parass. di Acari in Redia VII (1911) p. 293, t. XII, fig. 10.

Hab. in Acaro *Canestrinia neglecta* parasitica in *Scarambaeo Centauro* in Africa. — Longitudo receptaculi usque ad basim perith. 58-60 μ .; perithecia 80 \vee 28; appendix infer. 80 μ . long., super. 44 μ . long. (dempta utriusque cellula basali).

5. **Dimeromyces mucronatus** Paoli, Nuov. Laboulb. parass. di Acar. in Redia VII (1911) p. 290, t. XII, f. 6-7.

Hab. in Acaro *Canestrinia spectanda* parasitica in *Doreo bucephalo* in ins. Java. — Long. receptaculi usque ad basim peritheciæ 85 μ .; perithecia 80 \vee 35; appendix inf. 96-100 μ . long., super. 88-96 (dempta utriusque cellula basali).

RICKIA Cavara — Syll. XVI, pag. 689. — Ad hoc genus ducenda est: *Rickia Berlesiana* (Baccarini) Paoli, Nuov. Laboulb. etc. in Redia VII (1911) p. 288, t. XII, f. 5 — *Rhacomysces Berlesianus* Baccarini — Syll. XVII, p. 918.

1. **Rickia javanica** Paoli, Nuov. Laboulb. parass. di Acari in Redia, 3327 VII (1911) p. 285, t. XII, f. 1-2.

Hab. in Acaro *Pachylælape spectabili* in ins. Java. —

Receptacula sine stipite 65 μ . long., sine antheridiis 47 μ . cr.; antheridia 17-18 μ . longa, perithecia (sine trichogyno) 34 μ . longa.

2. *Rickia Coleopterophagi* Paoli, Nuov. Laboulb. parass. di Acari in 3328 Redia VII (1911) p. 286.

Hab. in Acaro Coleopterophago procero in India. — Receptacula (sine stipite) 88 μ . long., (sine appendice) 58 μ . lata; stipes 30 μ . long.; antheridia 15-16 μ . longa; perithecia (sine trichogyno) 51 μ . longa.

3. ? *Rickia minuta* Paoli, Nuov. Laboulb. parass. di Acari in Redia 3329 VII (1911) p. 287, t. XII, f. 4.

Hab. in Acaris Holocæleno, Pachylælape et ? Megatolælape in Brasilia et Æquatoria. — Receptaculum (sine stipite) 50 μ . long., (sine appendic.) 30 μ . lat.; stipes 39 μ . long.; perithecia (sine trichogyno) 20 μ . longa.

DISTICHOMYCES Thaxter, Proceed. of the Amer. Acad. vol. XLI, n. 11, (1905) p. 308, Monogr., Laboulb. II, p. 248 (Etym. *distichos* et *myces*). — Receptaculum constans e cellula basali et subbasali, superne seriebus binis parallelis cellularum auctum; cellulæ numero variae, extus ut plurimum aut appendicem sterilem aut antheridium gerentes; series una in perithecium, altera in appendicem primariam desinens. Appendices ad instar *Rickiae* et *Peyritschiae*. Antheridia maturescantia in ramulo acrogena, demum libera.

1. *Distichomyces Leptochariri* Thaxt. l. c., Monogr. p. 249, t. 71, f. 1-6. 3330 Characteres generis.

Hab. in capite, antennis et superf. inf. Leptochariri sp. in insula Java. — Long. total. 475 \times 11, exempl. minor. 125 \times 36; perithecia 50-55 \times 15-20; appendices longiores 75 \times 6; ramulus antheridialis 18 μ . long.

CHITONOMYCES Peyr. — Syll. VIII p. 914, XIV p. 727, XVI p. 678.

1. *Chitonomyces dentifer* Thaxt. Proceed. of the Amer. Acad. v. XLI, n. 11 (1905) p. 306, Monogr. Laboulb. II, p. 264, t. 34, f. 26-27.

Hab. in elytris Laccophili proximi pr. Eustis et Daytona, Florida Amer. bor. — Long. tot. usque ad apicem peritheci 90-110 \times 18-20; perithecia 65 \times 18; pars basalis receptaculi 35 μ ; sporidia 28 \times 3.

2. **Chitonomyces spinosus** Thaxt., Proc. Amer. Ac. Arts a. Sc. XLI, 3332 (1905) p. 808, Monogr. Laboulb. II, p. 265, t. 62, f. 40.

Hab. in artubus Laccophili sp. in insula Java. — Long. totalis ad apicem peritheciæ incl. pedicello, 130 \times 33; appendices marginales 45-60 μ . long.; perithecia 75 \times 20; sporidia 28 \times 2,5.

3. **Chitonomyces javanicus** Thaxt., Proceed. of the Amer. Acad. 3333 vol. XLI, n. 11 (1905) pag. 307, Monogr. Laboulb. II, pag. 266, t. 42, f. 37-38.

Hab. ad elytra Laccophili sp. in insula Java. — Long. totalis ad peritheciæ apicem 165-185 μ ., ad apicem processus receptaculi 180-200, latit. maxima 22-25 μ ; perithecia 90-110 \times 16; receptaculi pars basalis 75 μ . long., inclusa pediculo.

MONOICOMYCES Thaxt. — Syll. XI p. 675, XVII p. 915.

1. **Monoicomycetes similis** Thaxt., Proceed. of the Amer. Acad. v. XLI, 3334 n. 11 (1905) p. 305, Monogr. Laboulb. II p. 269, t. 35, f. 1-2.

Hab. in abdomine Homalotæ, speciem Lactarii vexantis, Maine Amer. bor. — Long. total. usque ad apicem peritheciæ 150-200; perithecia 90-110 \times 30, cellula pedicelli 35-46; sporidia 35 \times 4.

2. **Monoicomycetes Leptochiri** Thaxt., Proceed. of the Amer. Acad. 3335 vol. XLI, n. 11 (1905) p. 304, Monogr. Laboulb. II, p. 272, t. 34, fig. 39-40.

Hab. in toto corpore Leptochiri unicoloris, L. javanicæ et L. minutæ in insula Java. — Long. total. ad apicem peritheciæ 250-800 μ ; axis 18-20 μ . diam.; perithecia 70-90 \times 18-25; appendices longiores 50 μ .

EUCANTHAROMYCES Thaxt., Syll. XI p. 446, XIV p. 726, XVI p. 676.

1. **Eucantharomyces madagascarensis** Thaxt., Proceed. of the Amer. Acad. vol. XLI, n. 11 (1905) p. 306, Monogr. Laboulb. II, p. 278, t. 38, f. 24-26.

Hab. in elytris Callidæ, Madagascar. — Perithecia, inclusa cellula basali, 385 \times 60-70; cellula pedicelli 275-290 \times 40-45; receptaculum 165 \times 35-45; antheridia 130-150 \times 30-35, cellula basali 75 μ . long.; sporidia 60 \times 4.

CLEIDIOMYCES Thaxt., Monogr. Laboulb. II (1908) p. 281 (Etym. *kleidion* clavicula), *Monoicomycetes* Thaxt. p. p. olim et in Syll. — Receptaculum constans e binis cellulis superpositis; cellula basalis typice processus duo peculiares exerens, subbasalis appendices an-

theridiales et perithecia proferens. Appendix constans e cellula stipitis binisque cellulis superpositis cum quibus antheridium minutum compositum est sociatum, appendix desinens in extremitatem liberam cellularem supra antheridium. Perithecium stipitatum illo *Monoicomycetis* simile. — Ad hoc genus spectat:

1. *Cleidiomyces furcillatus* Thaxt. l. c. p. 281, t. 37, f. 3-4. Cfr. 3337 Syll. XVI p. 675.

HERPOMYCES Thaxt. — Syll. XVII p. 915.

1. *Herpomyces Platyzosteriæ* Thaxt., Proceed. of the Amer. Acad. 3338 vol. XLI, n. 11 (1905) p. 310, Monogr. Laboulb. II, pag. 286, t. 39, f. 3-4.

Hab. in antennis *Platzosteriæ* ingentis, Mexico. — Mas: long. totalis usque ad apicem antheridii 40 μ . Femina: long. tot. usque ad apicem processus subterminalis 160-225 μ ; perithecia 150 \approx 33; ejus processus terminalis 10 \approx 3,5.

2. *Herpomyces Phyllodromiæ* Thaxt., Proceed. of the Amer. Acad. 3339 vol. XLI, n. 11 (1905) p. 310, Monogr. Laboulb. II, pag. 288, t. 39, f. 1-2.

Hab. in antennis *Phyllodromiæ* in Abyssinia. — Mas: long. total. 30 μ . Femina: receptaculum primarium 25 μ long., secundarium 20 \approx 10; perith. usque ad apicem processus 80-100 \approx 15-20.

3. *Herpomyces Anaplectæ* Thaxt., Proceed. of the Amer. Acad. 3340 vol. XLI, n. 11 (1905) p. 309, Monogr. Laboulb. II, pag. 289, t. XXXIX, f. 9-10.

Hab. in antennis *Anaplectæ* spec. A. Dohrinanæ affinis pr. Caracas Venezuela (BLAKESLEE). — Mas: long. total. incl. anteridio 32-50 μ ; antheridia 24 \approx 2. Femina: receptaculum primarium 25 \approx 3, secundarium 16 \approx 13; perithecia 80-90 \approx 16; sporidia 18 \approx 2.

4. *Herpomyces Nyctoboræ* Thaxt., Proceed. of the Amer. Acad. v. XLI, 3341 n. 11 (1905) p. 309, Monogr. Laboulb. p. 292, t. 39, f. 5-8.

Hab. in antennis *Nyctoboræ latipennis*, Texas Amer. bor. — Mas: axis 54 \approx 10; long. total. usque ad apicem antheridii 100 μ ; antheridia 20 \approx 3. Femina: receptaculum secundarium 65 \approx 45-50; basis et cellula pedicelli peritheciæ 30-35 \approx 15-18, pars ascigera usque ad apicem spinæ 150-165 \approx 20-25; spina externa 50 μ , terminalis 12 μ long.

SMERINGOMYCES Thaxt. Monogr. Laboulb. II (1908) p. 296 (Etym. *smerinx*, *smeringos* funiculus), *Rhacomyses* Thaxt. p. p. olim et in Syll. — Individua? mascula setiformia e multis cellulis superpositis. Individua? feminea: receptaculum constans ex 3-4 cellulis superpositis, peritheciū unicum apice gerentibus; cellula subbasali appendice setiformi suffulta, cellula superior in similem apicem desinens. Peritheciū appendiculatum, cavitas ejus cum cellula stipitis continua. — Ad hoc genus spectat:

1. **Smeringomyces anomalus** Thaxt. l. c. p. 297, t. 42, f. 41-42.

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ACOMPSOMYCES Thaxt. — Syll. XVI p. 692, XVII p. 917.

1. **Acumpsomyces brunneolus** Thaxter, Proceed. Amer. Acad. Arts a.

Sc. XLI (1905) p. 311, Monogr. Lab. II, p. 298, t. 62, f. 10-12.

Hab. in elytris Corticariæ, Maine Amer. bor. — Long. tot. 125 μ ; perithecia 80 \times 20; cellula stipitis 12 \times 10; receptaculum 28 \times 12; appendices usque ad spinæ apicem 45 \times 10, cellula basalis 10 μ . longa.

STIGMATOMYCES H. Karst. — Syll. VIII p. 912, XIV p. 729, XVI p. 680.

1. **Stigmatomyces Venezuelæ** Thaxt., Proceed. of the Amer. Acad. vol. XLI, n. 11 (1905) p. 314, Monogr. Laboulb. II, pag. 304, t. 49, f. 20-21.

Hab. in abdomine Limosinæ in ins. Margarita Venezuelæ (BLAKESLEE). — Perithecia 95 \times 30; receptaculum 90 \times 14; appendices 45 μ . long., cellula pedicelli 22 μ , longa.

2. **Stigmatomyces pauperculus** Thaxt., Proceed. of the Amer. Acad. vol. XLI, n. 11 (1905) p. 313, Monogr. Laboulb. II, p. 306, t. 49, f. 18-19.

Hab. in artibus Muscæ sp. cujusdam, Ralum, Nova Pomerania Oceaniæ. — Long. tot. usque ad apicem peritheci 165-175 μ ; peritheciū 40-45 \times 35-38, rostellum 50 \times 16; appendices, inclusa cell. basali, 58-65 \times 15; sporidia 32 \times 3.

3. **Stigmatomyces micrandrus** Thaxt., Proceed. of the Amer. Acad. vol. XLI, n. 11 (1905) p. 312, Monogr. Laboulb. II, pag. 306, t. 47, f. 19-24.

Hab. in abdomine Muscæ cujusdam, Ralum, Nova Pomerania Oceaniæ. — Long. total. 275-325 μ ; receptaculum 90-110 \times 90; peritheciū 72-80 \times 50-60, rostellum 140-150 \times 16-18; appendices 35-40 μ . long., cellula pedicelli 20 μ . long.; sporidia 45 \times 4.

4. *Stigmatomyces Elachipteræ* Thaxt., Proceed. of the Amer. Acad. 3346
vol. XLI, n. 11 (1905) p. 311, Monogr. Laboulb. II, p. 308, t. 46,
f. 5-10.

Hab. in *Elachiptera longula*, New Hampshire Amer.
bor. — Perithecia 55-65 \times 30, rostellum 50 \times 16-20 appendices
80-90 μ . long., cellula stipitis 15-20 μ . long.; receptaculum 65 \times
18; sporidia 40 \times 3,5.

5. *Stigmatomyces Sarcophagæ* Thaxt., Proceed. of the Amer. Acad. 3347
vol. XLI, n. 11 (1905) p. 313, Monogr. Laboulb. II, p. 309, t. 49,
f. 14-17.

Hab. in abdomine *Sarcophagæ* sp. in ins. Margarita Vene-
zuelæ (BLAKESLEE). — Long. total. 600 μ .; receptaculum 200-
325 \times 30; perithecia 75-90 \times 35-42, ejus rostrum 150 \times 18-22; ap-
pendices usque ad curvaturam 110 μ . long.; cellula pedicelli 35
 μ . longa, cell. basalis 18-20 μ .; sporidia 35 \times 4.

SYMPLECTROMYCES Thaxt. Monogr. Laboulb. II (1908) p. 314 (Etym.
syn simul, *plectron* calcar), *Teratomyces* Thaxt. p. p. olim et in
Syll. — Receptaculum constans ex 3-4 cellulis superpositis, ex-
tima irregulariter prolifera; proliferationes orientes e cellulis nu-
merosis appendiculatis v. ramis brevibus appendiculatis, qui basim
peritheciæ plus v. minus complete amplectuntur. Appendices fer-
tiles v. steriles, postremæ simplices, cylindricæ sæpe in cellulam
rostratam desinentes; fertiles constantes e multis cellulis super-
positis e quibus pleræque ut antheridia funguntur, brevi processu
dentiformi dehiscentia. — Ad hoc genus spectat:

1. *Symplectromyces vulgaris* Thaxt. l. c., p. 315, t. 50, f. 14-16. 3348

LABOULBENIA Mont. et Rob. — Syll. VIII p. 909, IX p. 1132, XI
p. 450, XIV p. 730, XVI p. 682, XVII p. 918.

1. *Laboulbenia atlantica* Thaxt., Monogr. Laboulb. II (1808) p. 336, 3349
t. LIII, f. 16-17.

Hab. in elytris *Lathrobii multipunctati* et *Gargi Schaumii* in insula Madera. — Receptaculum 110 μ .; maxima
lat. 58 μ .; appendices longiores 380 μ .; perithecia 90 \times 70.

2. *Laboulbenia bilabiata* Thaxt., Proceed. of the Amer. Acad. v. XLI, 3350
n. 11 (1905) p. 315, Monogr. Laboulb. II, p. 352, t. 55, f. 9.

Hab. in *Brachino armigero* in Capite Bonæ Spei Afr. —
Long. tot. 450 \times 115, appendices 200-300 μ . long.; receptaculum

225-250; perithecia 240 \approx 75, inclusa processu terminali, qui 25 \approx 22 metitur.

3. **Laboulbenia Rougetii** Rob. et Mont. — Syll. VIII, p. 910, XIV, 3351 p. 734. — var. *japanensis* Thaxt., Monogr. Laboulb. II, p. 352, t. 55, f. 7.

Hab. in Brachini sp. in Japonia. — Longit. tot. usque ad apicem peritheci 700 μ . A typo præcipue distincta var. appendicibus obtusis, extus curvatis, brevioribus etc. — var. *sinensis* Thaxt., l. c. pag. 352, t. 55, f. 8. — In Brachino sinensi, China. — Long. tot. usque ad apicem peritheci 450 μ ; appendices pluries divisæ, divaricatae, usque ad 450 μ . longæ.

4. **Laboulbenia olivacea** Thaxt., Proceed. of the Amer. Acad. v. XLI, 3352 n. 11, 1905, p. 315, Monogr. Laboulb. II, p. 360, t. 55, f. 3.

Hab. in artubus et abdomine Lebiæ sp. in insula Java. — Long. tot. usque ad apicem peritheci 185-220 \approx 40-48; perithecia 80-100 \approx 32-40; receptaculum 90 μ . long.; appendices 75-110 μ . long.

5. **Laboulbenia pusilla** Thaxt., Proceed. of the Amer. Acad. v. XLI, 3353 n. 11 (1905) p. 316, Monogr., Laboulb. II, p. 365, t. 65, f. 6.

Hab. in parte inferiore Brachini scotomedis in Japonia. — Long. totalis usque ad apicem peritheci 200-210 μ ; appendices 100-110 μ . long.; receptaculum 100-110 μ . long.; perithecia 90 \approx 36-40; sporidia 45 \approx 5.

6. **Laboulbenia Lebiæ** Thaxt., Monogr. Laboulb. II, p. 371, t. 61, 3354 f. 3-4.

Hab. in artubus Lebiæ sp. in insula Java. — Perithecia 165 \approx 50; appendices longiores 125 μ ; receptaculum 300 \approx 60; longit. totalis 500 μ .

7. **Laboulbenia subpunctata** Thaxt., Monogr. Laboulb. II, p. 394, t. 64, 3355 f. 5-6.

Hab. in prothorace et capite Galeritæ spp. Argentina, Brasilia; in Galerita carbonaria et G. unicolor in Amazonia Bras. — Long. tot. usque ad apicem peritheci 400-450 μ ; maxima lat. 70 μ ; perithecia, inclusa pedicello, 200 \approx 40; appendices 125-150 μ . long., rami longiores 120 μ ; sporidia 44 \approx 5.

8. **Laboulbenia bicolor** Thaxt., Monogr. Laboulb. II, p. 398, t. 62, 3356 f. 13-15.

Hab. in artubus Galeritæ spec. Venezuela et (forma major) Galeritæ carbonariæ in Brasilia. — Long. tot. usque ad apicem peritheci 275-300; receptaculum 100-125 \approx 35-40; peri-perithecia sine pedicello 125-150 \approx 18-32; appendices 125-150;

sporidia 50 \approx 5. In forma majore dimensiones circ. quarta parte majores.

9. **Laboulbenia Ozenæ Thaxt.**, Monogr. Laboulb. II, p. 403, t. 63, 3357 f. 11.

Hab. in Ozæna angulicollis, Venezuela. — Long. tot. usque ad apicem perithecii 220, maxima lat. 60 μ .; receptaculum 150 μ . long.; perithecia 90-100 \approx 30-33; sporidia 55 \approx 5; antheridia 36 μ . long.

10. **Laboulbenia texana Thaxt.**, Monogr. Laboulb. II, p. 404. — Syll. 3358 XI, p. 453, XIV p. 734. — var. *oaxacana* Thaxt., l. c. p. 405, t. 63, f. 7.

Hab. in prothorace Brachini lateralis, Oaxaca Mexici. — Long. tot. 550 μ .; perithecia 200 \approx 85; appendices 400 μ . long.; receptaculum 470 μ .; sporidia 60 \approx 5. — var. *retusa* Thaxt. l. c. p. 406, t. 63, f. 6. — In prothorace et artubus Brachini sp. in Florida et Argentina. — Tot. longit. usque ad apicem perithecia 200-300 μ .; receptaculum 275-360 μ . long.; appendices 180-280 μ . long.; perithecia 150 \approx 60; sporidia 70 \approx 5.

11. **Laboulbenia pallescens Thaxt.**, Proceed. of the Amer. Acad. 3359 vol. XLI, n. 11 (1905) p. 318, Monogr. Laboulb. II, p. 407, t. 61, f. 9-10. — Ita vocanda *Lab. pallida* Thaxt. (1902). — Syll. XVI, p. 687, non Thaxt. (1899) — Syll. XVII, p. 922.

12. **Laboulbenia chætophora Thaxt.**, Proceed. of the Amer. Acad. 3360 vol. XLI, n. 11 (1905) p. 317, Monogr. Laboulb. II, pag. 412, t. 67, f. 19.

Hab. in abdomen Dinetutis solitarii, Madagascar? et Gyrini sp. in America boreali. — Long. total. usque ad apicem perithecia 800 \approx 185; receptaculum 525 μ . long.; perithecia 380 \approx 10, spinulae longiores 40 μ .

13. **Laboulbenia rotundata Thaxt.**, Proceed. of the Amer. Acad. v. XLI, 3361 n. 11 (1905) p. 317, Monogr. Laboulb. II, p. 418, t. 41, f. 16.

Hab. in corpore Dineutis spinosi in insula Java. — Tot. long. usque ad apicem perithecia 450 μ . long.; receptaculum 360 μ . long.; perithecia 185 \approx 65, exclusa cellula marginali quæ 18 μ . lata.

14. **Laboulbenia chilensis Speg.**, Fungi Chilenses (1910) p. 133 cum 3362 icon. — Tota fumoso-olivascens 150-200 μ . alta; cellulæ 7 receptaculi normalibus; perithecio ellipsoideo erecto, ostiolo umbonato normali nigro collariato ornato; cellulæ apicalibus distantioribus nigris, paraphysi unica crassa perithecio paullo longiore; ramulo antheridiali brevi, antheridiis duobus ornato.

Hab. in elytris *Bembidii*, Quinta Normal de Santiago Chile
Amer. austr.

15. **Laboulbenia sigmoidea** Speg., Fungi Chilenses (1910) p. 134, cum 3363 icon. — Tota subhyalina v. pallide mellea, sigmoidea 300-500 μ . alta; cellulis 5 receptaculi normalibus, sexta et septima minimis; perithecio subhorizontali, dorsi parte distantiori subhemisphaerica gibbose adnata, ostiolo subnormali nigro-torquato seu anulo nigro; paraphysibus 1 v. 2 crassis simplicibus v. bifidis; ramulo antheridifero brevi saepius mox evanescente, antheridiis 4 ornato.

Hab. in prothorace *Argutoridii*, Quinta Normal de Santiago de Chile America austr.

16. **Laboulbenia marina** Picard, C. R. Soc. Biol. Paris LXV (1908) 3364 pag. 484, 2 fig. — Tota pallide flava, 150 μ . longa; receptaculo cylindraceo tricellulari, basi cellula minuta nigra pedicellari aucto, sursum ramulum lateralem brevem appendiciferum, nec non perithecium singulum exerente; appendicibus, cellula nigra depressa fultis, suboctonis, 3-4-cellularibus, fasciculatis, 30-38 μ . longis; perithecio fusoideo-conico, 76 μ . longo, diaphano, sublibero; sporidiis fusoideis, 26 μ . long., bicellularibus, cellula inferiore multo minore subtriangulari vix 4-5 μ . longa.

Hab. in elytris et pilis *Aepodis Robini* (insecti carabidei) in rimis saxorum graniticorum ab alga *Laminaria obductorum* in insula Tatihon in Gallia.

RHACOMYCES Thaxt. — Syll. XI, p. 454, XIV p. 735, XVI p. 690, XVII p. 917.

1. **Rhachomyces Aphænopsis** Thaxt., Proceed. of the Amer. Acad. 3365 vol. XLI, n. 11 (1905, p. 314, Monogr. Laboulb. p. 322, t. 45, f. 12-14.

Hab. in elytris *Aphænopsis cerberi*, Ariège Galliae. — Receptaculum 75-165 \times 15-18; perithecium (non perfecte matrum) 85 \times 25; appendices longiores 300-350 μ .

2. **Rhachomyces javanicus** Thaxt., Proceed. of the Amer. Acad. 3366 vol. XLI, n. 11, (1905) p. 314, Monogr. Laboulb. II, pag. 426, t. 45, f. 1-2.

Hab. in artubus minutis Coleopteri (Harpaloidei?), Buitenzorg ins. Javæ. — Long. total. 350-460 μ ; receptaculum 275-350 \times 18; perithecia 95-110 \times 35-40; appendices longiores 90-100 μ .

HYDROPHIOMYCES Thaxt., Monogr. Laboulb. II (1908) pag. 431
 (Etym. *hydr* aqua et *philos* amicus), *Ceratomyces* Thaxt. p. p. olim
 et in Syll. XVI, p. 693. — Receptaculum constans e serie indeterminata
 cellularum superpositarum; cellulæ divisionis intercalaris et
 subinde quoque longitudinalis ope indefinite multiplicatae. Axis
 appendiculatum illi receptaculi similis et cum eo continuus, exerens
 binas series ramorum e cellulis minutis oriundorum, e quibus cel-
 lulæ inferiores in cellulas antheridiales cuspidatas mutantur. Pe-
 rithécia e cellulis determinatis, paucis constantia. — Ad hoc genus
 spectant:

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|---|------|
| 1. <i>Hydrophilomyces rhynchophorus</i> Thaxt., l. c. t. 68, f. 1-4. | 3367 |
| 2. <i>Hydrophilomyces reflexus</i> Thaxt., l. c. p. 432, t. 69, f. 3. | 3368 |

RHYNCHOPHOROMYCES Thaxt., Monogr. Laboulb. II (1908) p. 432
 (Etym. *rhynchos* rostrum et *phoreo* fero), *Ceratomyces* Thaxt., p. p.
 olim et Syll. XVI, p. 694. — Receptaculum indeterminatum, con-
 stans e plurimis cellulis superpositis apice in peritheciū desinen-
 tibus. Peritheciū ventre et collo distinctis præditum, contentu
 indefinite mul sicellulari. Appendicis basis a ventre non distincta.
 Antherozoidia apice et lateraliter protrusa plerumque e cellulis
 ramulorum et appendicis. — Ad hoc genus spectant:

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|---|------|
| 1. <i>Rhynchophoromyces elephantinus</i> Thaxt., l. c. p. 433, t. 68, f. 5. | 3369 |
| 2. <i>Rhynchophoromyces denticulatus</i> Thaxt., l. c. p. 432, t. 70, f. 1. | 3370 |

AUTOICOMYCES Thaxt., Monogr. Laboulb. II, p. 434 (1998) (Etym.
autos idem, *oicia* domus et *myces*), *Ceratomyces* Thaxt. p. p. —
 Receptaculum e cellulis tribus superpositis constans; ima cellula
 sepe in pedicellum atratum abiens, supera cellulas binas gerens,
 quarum altera peritheciū singulū, altera appendicem antheridiāle
 gerit; appendix antheridialis constans e cellulis seriatis
 extus irregulariter ramigeris. — Huc spectant *Autoic. acuminatus*
 Thaxt. l. c., *Autoic. ornithocephalus* Thaxt. l. c. jam. ad *Cerato-*
mycem relati. Cfr. Syll. XVI, p. 693.

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|--|------|
| 1. <i>Autoicomycetes falcifer</i> Thaxt. Monogr. Laboulb. II, p. 435, t. 71, | 3371 |
| f. 18, <i>Ceratomyces falcifer</i> Thaxt., Proceed. of the Amer. Acad.
vol. XLI, n. 11 (1905) p. 318. — Charact. generis. | |

Hab. in abdomen Berosi sp. in ins. Java. — Long. tot. usque
 ad apicem peritheciī 250 μ ; peritheciū 125-150 \times 55-65, appen-

dices 435-470 \approx 22; receptaculum 90-110 \approx 35, append. 110-125 μ . long.; sporidia 55 \approx 4.

CERATOMYCES Thaxt. — Syll. XI p. 455, XIV p. 736, XVI p. 693.

1. **Ceratomyces ansatus** Thaxt., Monogr. Laboulb. II, p. 439, t. 69, 3372 f. 4-5.

Hab. in *Tropisterni* sp. in *Brasilia et Trop. striolato* in Florida. — Long. totalis ad apicem peritheci 425-475 μ ; perithecia 325-350 \approx 75-80, appendices 220 \approx 36; receptaculum ad apicem processuum, inclusio pediculo, 175-200 μ . long.

COREOMYCES Thaxt. — Syll. XVII p. 924.

1. **Coreomyces curvatus** Thaxt. Proceed. of the Amer. Acad. v. XLI, 3373 n. 11 (1905) p. 318, Monogr. Laboulb. II, p. 443, t. 71, f. 7-15.

Hab. in *elytris Corisiae* sp. pr. Cambridge Mass. Amer. bor. — Long. total. 350-360 μ ; perithecia 130-140 \approx 36; cellula stipe 70 \approx 25; appendices 125 μ . long.; sporidia 55 \approx 4.

TRENOMYCES Chatton et Picard, Bull. Soc. Entom. Fr. XXV (1909)

p. 155 (Etym. *treno*, vox corrupta a *traho* et *myces*). — Dioicus; individua utriusque sexus linearia quadricellularia; cellulæ basales, subbasales et duæ terminales steriles; organa reproductionis e cellula subbasali oriunda et supra cellulam basalem plus minusve inflatam inserta, in series lineares radiantes disposita; juvenilia ab axe distantiora. Antheridia composita ex una cellula pediculari et super hanc ex stratis binis cellularum intermedianarum et antheridialium, postremis per collum evacuantibus. Perithecia juvælia trichogynum laterale, subapicale gerentia; perithecia fecundata ex cellula ascogena unica, ascos biseriales alternos tetrasporos ferente, formata. Sporidia biseptata.

1. **Trenomyces histophtorus** Chatt. et Pic., Bull. Soc. Entom. Fr. 3374 XXX (1909) pag. 156 cum icon. et tab. VII, Trinchieri in Boll. Soc. Nat. Napoli, vol. 24 (1910) p. 1-7, extr. — Characteres generis; totus fungus achrous; cellula basali sphaerica ampla matricem perforante et deorsum in bulbum bulbillos quaternos ferentem inflata; cellula subbasali abortiva cellulis terminalibus sterilibus ciboriiformibus apice acuminatis, appendicibus sterilibus; antheridiis pedunculatis amphoriformibus ex cellulis quatuor intermediiis et septem antheridialibus formatis; peritheciis junioribus

initio clavatis demum elongato-fusoideis per collum papillis quaternis cinctum dehiscentibus; sporidiis lanceolatis biseptatis, cellula altera majore et altera minore insertioni apta.

Hab. in corpore Pediculorum Mallophagorum, Menopi et Goniocotis abdominalis, Banyuls-sur-Mer Galliae et Menopi pallidi, Neapoli (E. ARMENANTE).

PYRENOMYCETÆ Fr. em.

Syll. I p. 1, IX p. 364, XI p. 252, XIV p. 462, XVI p. 398,
XVII p. 524.

Fam. 1. Perisporiaceæ Fr. (*)

Trib. 1. Erysipheæ Lév.

SPHÆROTHECA Lév. — Syll. I p. 3, IX p. 364, XIV p. 462, XVI
p. 402, XVII p. 524.

1. **Sphærotheca spiralis** Neger, Centralbl. f. Bakter. etc. II, Abt. 3375
XX (1907) p. 93. — Mycelio et conidiis albis in foliis et ramis
evolutis; peritheciis plerumque caulicolis, globosis, 75 μ . c. cr.,
atro-brunneis; appendicibus albis spiraliter contortis, simplicibus,
continuis; ascis solitariis, globosis, 60 μ . c. diam.; sporidiis 8 in
quoque asco, ellipsoideis, hyalinis, 17-20 μ . long.

Hab. in foliis caulibusque Escalloniæ rubræ prope Lago
argentino ad marginem fageti, Patagonia, Argentina Americæ
austr. (P. DUSÉN).

2. **Sphærotheca mors-uvæ** (Schw.) Berk. Syll. I; p. 5. — var. *japonica* Salm., Ann. Mycol. VI (1908) p. 2. — A typo differt peri-
theiciis et ascis minoribus, nempe primis 68-85 μ . diam., postremis
55-70 μ 38-45.

Hab. in caule foliisque Stephanandræ flexuosa, Morioka Japoniæ (K. OKAMURA).

3. **Sphærotheca Castagnei** Lév. — Syll. I p. 4. — forma *Alchemillæ* 3377
Stein, Centralbl. f. Bakter. etc. II Abt., XXI (1908) p. 733. —
Characteribus præcipue biologicis distincta.

Hab. in *Alchemillarum* sp. diversis in Helvetia. Teste cl.

(*) Cfr. F. Theissen, *Perisporiales riograndenses*. S. Fiel (in Broteria IX,
1910) aliaeque recentiores commentationes et quoad biologiam Erysiphearum cfr.
G. M. Reed, *Infection experiments with Erysiphe Cichoracearum* etc. Madison
1908 et *The Mildews of Cereals*. Columbia Mo. 1909.

Stein l. c. species ob notas biologicas etiam in alias formas dividenda. — forma **Euphorbiæ-dulcis** Ferraris, Ann. R. Ist. bot. Roma IX; fasc. 3 (1902) pag. 216: a typo differt mycelio nunc anulos brunneos perithecia limitantes efformante, nunc maculas bruneo-tomentosus sistente. — In foliis caulibusque Euphorbiæ dulcis, Oropa in Pedemontio Italie bor. (CESATI).

4. **Sphærotheca fuliginea** (Schlecht.) Pollacci, Erysiph. ital. in Atti 3378 R. Ist. Bot. Pavia ser. II, v. IX (1905) p. 8 (extr.). — Ita vocanda *Sphærotheca Humuli* var. *fuliginea* (Schl.) Salmon Monogr. Erys. p. 49, seu *Sph. dentosa* Kicks — Syll. I, p. 4.

CYSTOTHECA B. et C. — Syll. I p. 72, XVI p. 407. — De hoc genere cfr. Saccardo in Ann. mycol. (1911) p. 250, ubi contendimus genus hoc ob endothecium ex integro a perithecio secedens et cum asco se liberans, distinguendum esse a *Sphærotheca*.

1. **Cystotheca lanestris** (Harkn.) Sacc. in Ann. mycol. l. c. — Ita 3379 vocanda *Sphærotheca lanestris* Harkn. — Syll. IX, p. 364.

PHYLLACTINIA Lév. — Syll. I p. 5, IX p. 366, XVI p. 398, XVII p. 524.

1. **Phyllactinia suffulta** (Reb.) Sacc. — Syll. I, p. 5. — var. **angulata** 3380 Salmon, Ann. Myc. v. III (1905) p. 500, tab. XIV, fig. 1-15. — A typo differt conidio crasso ambitu plus minusve angulari nunc subquadrato- vel oblongo-rectangulari, nunc rectangulari-cylindrico, saepe medio constricto, uno apice v. utrinque rotundato v. truncato vel obtuse apiculato, 45-60 × 15-26 raro ad 85 μ. longo.

Hab. in foliis vivis Quercus Kelloggii, Q. macrocarpæ, Q. aquatica, Q. coccinea, Q. disoloris, Q. palustris, Q. rubra, Castanea sativa, Fagi ferruginea, et Ulmi alata, in Americae bor. pluribus locis, in foliis vivis Adesmia sp. in Argentina (SPEGAZZINI), in foliis vivis Hippophaës rhamnoidis in Europa. — Var. **rigida** Salmon, l. c. p. 500, tab. XV, fig. 2: a typo differt conidiophoro rigido elongato setiformi ad 500 μ. longo, circ. 5 μ. lato, fere ad apicem parietibus incrassatis. — In foliis in Mexico (FARLOW) et Guatemala (SEEMAN). — Var. **subspiralis** Salmon, l. c. p. 501, tab. XV, fig. 3: a typo differt conidiophoro in parte inferiore subspirali. — In foliis vivis Dalbergia Sissoo, Poona Indiae orient. (G. MARSHALL WOODROW) et Dehra Dun (E. J. BUTLER).

UNCINULA Lév. — Syll. I p. 6, IX p. 366, XI p. 252, XIV p. 462, XVI p. 399, XVII p. 524.

1. **Uncinula simulans** Salm., Ann. Mycol. VI (1908) pag. 2. — Am. 3381 phigena; mycelio fugaci; peritheciis sparsis, globoso-depressis, 90-120 μ . diam.; appendicibus 15-30, perithecii diametrum paulo v. duplo superantibus, plerumque v. in eodem perithecio inæqualibus, gracilibus, basim versus c. 5 μ . cr. sursum tenuatis, continuis, ad apicem rubro-fuscis simpliciter uncinatis; ascis oblongo-ovoideis, breviter pedicellatis, 60-70 \times 35-45; sporidiis oblongis 4-6, matutitate granulato-obscuris, 18-20 \times 10-12.

Hab. in foliis Rosæ multifloræ, Morioka Japoniæ (K. O-KUMURA). — Species formosa appendicibus gracilibus continuis læte coloratis distinctissima.

2. **Uncinula australiana** Mc Alpine, in Journ. Linn. Soc. N. S. Wales, XXIV (1899) p. 302, t. 23, f. 5-9, Salmon, Monogr. Erysiph. p. 118, t. V, f. 94, 95. — Amphigena; mycelio persistente; peritheciis pro more gregariis, subinde sparsis, 90-140 μ . diam., contextus 10-15 μ . diam.; appendiculis 7-20, pro more 12, perithecii diametrum subæquantibus, 1-septatis, basi plus minus saturate brunneis, simplicibus, levibus, tenui-tunicatis, sursum vix dilatatis, circ. 5 μ . diam., apice typice helicoideo; ascis in quoque perithecio 3-5, late ovatis v. subglobosis, interdum brevissime stipitatis, 45-50 \times 30-40; sporidiis 5-7, raro 8, ellipsoideis 20-22 \times 10-12.

Hab. in foliis et inflorescentia Lagerstræmiae indicæ et L. ovalifoliae, Sydney Australiæ et Sendai et Tokyo Japoniæ. — Inter *Unc. necatorem* et *Unc. Sengokui* fere media.

3. **Uncinula Prosopidis** Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 324. — Mycelio laxissimo ex hyphis tenuibus hyalinis 45 μ . cr., ramoso-intricatis septulatis constituto, amphigeno; peritheciis hinc inde laxe gregariis, saepius epiphyllis, globulosis 150 μ . diam., atris carnosulo-membranaceis, contextu olivaceo indistincto vix pellucido, setulis radiantibus confertiusculis antice subattenuatis 50-120 \times 5-6, apice obtusiusculis saepè subincrassatulis, modice circinatis levibus continuis hyalinis ornatis; ascis 6-8 in quoque perithecio, ex ovato subellipsoideis a paraphysatis 50-70 \times 25-30, saepius bisporis; sporidiis elliptico-subcylindraceis 35 \times 14-15 utrinque obtusis rotundatis, continuis, saepius grosse biguttulatis hyalinis.

Hab. ad folia viva Prosopidis campestris in Horto botanico bonaërensi, Argentina Amer. austr.

4. *Uncinula incrassata* Salm., Ann. Mycol. VI (1908) pag. 525. — 3884

Amphigena; mycelio effuso persistente; peritheciis sparsis v. subgregariis parvulis, 100-140 μ . diam., globoso-depressis; appendicibus 60-120 in quoque perithecio, quoad longitudinem inæqualibus, peritheciæ diametrum dimidium æquantibus nunc integrum paullo superantibus, nunc intermediis, 6-7 μ . cr., ad apicem parietibus incrassatis, apice simpliciter strictimque uncinatis, continuis; ascis 3-7 (immaturis).

Hab. in foliis *Pterocarpi melliferi*, Gazaland Africæ (C. F. M. SWYNNERTON) — *U. Tectonæ* affinis, sed appendicibus tunicae incrassata et latioribus facile distincta.

5. *Uncinula Tectonæ* Salm., Ann. Mycol. V (1907) p. 479. — Epi- 3885

phylla; mycelio tenui, effuso persistente; peritheciis subgregariis, hemisphæricis circ. 110 μ . diam., cellulis 10-15 μ . diam.; appendicibus numerosis usque ad 75-100, peritheciæ diam. subæquantibus, sæpe longitudine varia in quoque perithecio, tenuibus, hyalinis, continuis, subinde sursum crassius tunicatis, basi 5-6 μ . cr., superne 4 μ . cr. apice arcte uncinatis et interdum helicoideis; ascis 4-8 in quoque perithecio, late ovoideis, breviter distincte pedicellatis, 65-70 \times 38-40; sporidiis 6-8, rarius 4 conglobatis, circ. 25 \times 14.

Hab. in foliis *Tectonæ grandis*, Jubulpore Indiæ orient.

— Species numero, longitudine et tenuitate appendicis distinguenda.

6. *Uncinula Nothofagi* Thaxter, Botan. Gazette L (1910) pag. 439, 3886

tab. XIX, fig. 7-10. — Epiphylla v. rarius amphigena; peritheciis mycelio albido persistenti effuso insidentibus, dense congestis v. discretis, globoso-depressis, 80 μ . diam. (70-100 μ), rufo-brunneis, cellulis 10-12 μ . diam.; appendicibus 5-15, continuis, 70-100 μ . long., inferne rectis v. curvatis, rigidis, induratis, bruno-suffusis; superne spiraliter arcte 4-8-convolutis, apice helicoideo-subinflatis, spiris basilaribus plus minus subfuscis, ceteris hyalinis; ascis late ovalibus, 5-8 in quoque perithecio, suboctosporis; sporidiis oblongo-ellipsoideis 18-20 \times 10; conidiis subcylindraceis 25-32 \times 10-15.

Hab. in foliis *Nothofagi antarcticæ* var. birenatae a *Taphrina entomospora* occupatis v. rarius in foliis sanis, Punta Arenas Patagoniæ Americæ austr.

7. *Uncinula magellanica* Thaxter, Botan. Gazette 4 (1910) pag. 440, 3887

tab. XIX, fig. 11-13. — Plerumque epiphylla; perithecio mycelio albido effuso exiguo insidensibus, discretis v. subgregariis, globoso-

depressis, opacis v. subopacis, atro-brunneis, 90-150 μ . diam. sed plerumque 130 μ ., cellulis 10-20 μ . latis; appendicibus 10-22, hyalinis, longis, tenuibus, curvatis v. subflexuosis, subrigidis, 225-400 \approx 5-6, apice subinflatis et subrecurvatis; ascis late clavatis, 55 \approx 25, plerumque 3-4-sporis, sporidiis 20 \approx 10-12, conidiis subcylindraceis 35-40 \approx 15-18.

Hab. in foliis Nothofagi antarcticæ var. birenatae, Taphrinâ magellanica obscessis, Punta Arenas Patagoniae America austr.

8. **Uncinula Mori** Miyake, Botan. Mag. Tokyo XXI, n. 240 (1907) 3388
extr. p. 2, cum icon. — Mycelio tenui, septato 3,8-5 μ . cr., hinc inde haustoria lobulata generante, pelliculas alba subrotundas epiphyllas efformante; peritheciis minutis, nigris, hemisphaericis, 92-130 μ . diam., cellulis 10-17 μ . diam.; appendicibus 12-26, promore 15-17, basi 5-6 μ . cr., lumine (ob tunicae crassitiem) angustissimo, sursum multo latiore praeditis et 7-8 μ . cr., apice summo tenuatis et simpliciter arcte uncinatis, 130-216 μ . longis; ascis quaternis, rarius ternis, ovato-ellipsoideis, brevissime pedicellatis, 50-60 \approx 40-50, tetra-pentasporis; sporidiis ellipsoideis, utrinque rotundatis, 27-35 \approx 15-19, granuloso-factis, hyalinis.

Hab. in foliis Mori albæ in Japonia pluribus locis. — *Uncinula flexuosa*, *Unc. geniculata* et *U. Miyabei* nonnullis notis affinis.

9. **Uncinula Pirottiana** Bacc., Funghi Eritrea, Ann. Bot. v. IV (1906) 3389
pag. 273, tav. X, fig. 2. — Hypophylla, mycelio tenui evanido; peritheciis minutis, atris, globosis μ . 84-90 latis, monoascis appendicibus numerosis continuis, perithecium æquantibus, hyalinis, ad apicem attenuatis, arcte circinatis; ascis tetra-hexasporis 68 \approx 48; sporidiis hyalinis ellipticis, 24 \approx 14.

Hab. in foliis Ficus sp., Valle Catalaben, Mensa Erythræa Afr. (PAPPI).

10. **Uncinula columbiana** Selby — Syll. XI, p. 252. — Nascitur in 3390
foliis Scutellariæ laterifloræ, nec *Uncinulæ* v. *Unciniae* ut legitur l. c.

MICROSPHÆRA Lév. — Syll. I p. 10, IX p. 368, XI p. 252, XIV p. 463, XVI p. 402, XVII p. 525.

1. **Microsphæra Sophoræ** G. Gándara in Memorias y revista de la 3391
Sociedad científica A. Alzate, Mexico, XXVI, (1908) p. 234, t. I-II.
— Mycelio epiphylo, arachnoideo, effuso, persistente; peritheciis

globulosis, nigris, superficialibus, sparsis, reticulatis, 100-130 μ . diam.; ascis 3-6 in quoque perithecio, ovoideis, brevissime pedicellatis, 50-60 μ . long., 3-5-sporis; sporidiis ellipsoideis, intus granulosis, 15-20 \times 8-14; appendiculis 9-15, hyalinis, horizontalibus, inæqualibus, perithecio fere duplo longioribus, 3-6 vicibus dichotome ramosis, ramulis ultimis turgidis, divaricatis, apice acuminatis.

Hab. in foliis vivis Sophoræ sp. indet. in Schola Agriculturæ S. Jacinto, Mexico. — Auctor præterea describit sporulas ellipsoideas, hyalinæ, nucleatas, numerosas, 2 \times 1,5, quæ verisimiliter, ut opinamur, *Cincinnobolo* pertinent.

2. **Microsphæra penicillata** (Wallr.) Lév. em. — Syll. I, p. 13. — 3392
var. **pseudo-Lonicerae** Salm., Ann. Mycol. VI (1908) p. 4. — A typo differt appendicibus apice ter-quinques regulariter dichotomis, ramulis ultimis plerumque rectis.

Hab. in foliis Sabiæ japonicæ, Misato-mura, Tosa Japonia (T. YOSHINAGA). — Var. **Yamadai** Salm., l. c. pag. 3. — A typo differt appendicibus apice minus divisis plerumque ramis primis longis, ramulis ultimis sæpe plus minus contortis, maturitate laxe recurvis. — In foliis Hoveniæ dulcis et Juglandis Sieboldianæ in Japonia (YAMADA, KUSANO et OKAMURA). — Var. **ludens** Salmon, Monogr. Erysiph. p. 154, t. II, fig. 27-30 — A typo dignoscitur appendicibus flexuoso-contortis, apicibus variis, modo rectis, modo recurvatis. — In foliis Viciæ americanæ, Dakota, Wyoming et Montana Amer. bor.

ERYSIPHE Hedw. — Syll. I p. 15, IX p. 370, XI p. 253, XVI p. 404, XVII p. 526.

1. **Erysiphe Martii** Lév. — Syll. I, p. 18. — var. **Astragali** Sacc. in 3393
Potebnia, Trav. Soc. Nat. Univers. Kharkov t. XXXVIII (1907).
Appendicibus perithecio pluries longioribus.

Hab. in foliis Astragali glycyphylli pr. Kursk Rossie.

2. **Erysiphe taurica** Lév. — Syll. I, p. 16. — var. **Zygophylli** Maire 3394
in Bull. Soc. Sc. Nancy, sér. 3, VI (1905) p. 6, t. II f. 4-6 (extr.).
— A typo differt conidiis longe cylindraceis, 57-72 \times 13-14.

Hab. in foliis Zygophylli Fabaginis in Asia minore.

3. **Erysiphe Ricini** Speschn., Monit. Jard. bot. Tiflis (1906) p. 14. — 3395
Mycelio epiphylo, raro hypophyllo, arachnoideo; hyphis hyalinis 6-9 μ . cr., haustoriis non lobulatis, minutis, spinuliformibus; co-
nidii facile dilabentibus, elongato-ovoideis v. cylindraceis, 36-48 \times

10-16, verruculosis; perithecis irregulariter disseminatis, semiimmersis, brunneis, 150-220 μ . diam., appendicibus brevibus, simpli- citer furcatis, hyalinis, ramulis undulatis cum mycelio intertextis; ascis in singulo perithecio 17-25, piriformibus, in pedicellum pro- tractis 60-70 \times 34-40, bisporis; sporidiis ellipsoideis, 26 \times 20, hyalinis.

Hab. in foliis Ricini communis, Eriwan Caucasi (A. ROLLOFF).

Trib. 2. Eurotieæ Sacc.

EUROTIUM Link — Syll. I p. 95, IX p. 37, XI p. 254, XVI p. 1123, XVII pag. 527. — De hoc genere cfr. MANGIN in Ann. Sc. nat. Bot. (1908) p. 351.

1. **Eurotium baculatum** (Westl.) Sacc. et Trott. *Penicillium baculatum* 3396 Westling in Svensk Bot. Tidskr. IV (1910) p. 140, f. 3. Status conidioph.: *Penicillium baculatum* Westl., l. c. f. 1-2 (Cfr. suo loco). — St. ascoph.: peritheciis globulosis, 100-250 μ . diam., flavis, pa- riete fragili, gracili instructis; ascis globosis v. ovoideis, hyalinis, suboctosporis; sporidiis lenticularibus, 5,2-6 μ . diam. e latere 4,2-4,8 μ . cr. margine subcanaliculatis.

Hab. in foliis aliquot plantarum in M. Åreskutan Jemtlandiæ. — *Eurotii* gen. st. conidioph. est pro more *Aspergillus*; hinc ul- terius inquirendum an huic speciei vere adscribenda sit species citati *Penicillii*.

2. **Eurotium Chevalieri** Mangin, Ann. Sc. Nat. IX ser. (1908) p. 361, 3397 cum icon. — Mycelio albo effuso floccoso, sæpe repente et mar- gine fimbriato, dein ob conidia virescente; conidiophoris ut in *A- spergillo glauco*; conidiis sphæricis v. ovoideis verrucosis, 5,6-7,4 μ . diam.; peritheciis in mycelio nidulantibus, copiosis, minutis, sul- phureis; ascosporis lenticularibus peripherice distincte et profunde sulcatis, 4-7 e latere 3,7 μ .

Hab. in substantiis organicis putrescentibus ex Algeria (CHE- VALIER).

3. **Eurotium Amstelodami** Mangin, Ann. Sc. Nat. IX sér. pag. 360, 3398 cum icon. — Mycelio albo, effuso, subvelutino, dein ob conidia virescente margine flocculoso; conidiophoris cylindraceis 150 μ . long., 10 μ . cr., apice subgloboso-verruculosis; sporophoris bre- vissimis paliformibus obtusis; conidiis catenulatis, sphæricis, te- nuiter echinulatis, viridibus, 2,8-4,7 μ ; peritheciis in mycelio ni-

dulantibus, copiosis, minutis, sulphureis; sporidiis lenticularibus hyalinis, levibus, 4,7 e latere 3,7 μ ., peripherice distincte sulcatis.

Hab. in substantiis organicis putrescentibus in Gallia ex Hol-
landia. — Quoad characteres culturæ confer L. Mangin l. c.

4. *Eurotium fumigatum* (Grijns) Sacc. et Trott. *Aspergilli fumigati* 3399
st. ascoph. Grijns in Centralbl. Bakt. XI (1907) p. 331. — Pe-
ritheciis minutis, contextu bistratoso e cellulis prismaticis atro-
ruberis formato, granulis virescentibus valde refringentibus con-
sperso; ascis octosporis; sporidiis fusco-ruberis, taeniola anulari
æquatoriali (elaterium fungente) cinctis.

Hab. in decocto hordeaceo socio st. conidioph. *Aspergillo fumigato*, in Germania.

CRYPTOTHECIUM Penz. et Sacc. — Sacc. — Syll. XIV, p. 465. — Prof. Höhnle (Fragm. z. Mykol. VIII, p. 23) contendit hoc ge-
nus ad *Byssonectriam* inter Hypocreaceas referendum esse. Hoc vero peritheciis minutissimis, in subiculo omnino peculiari a ma-
trice libero nidulantibus præditum a Nectriaceis probe distinguitur.

SACCARDIA Cooke — Syll. I, p. 24, IX p. 37; XI p. 253.

1. *Saccardia Durantæ* Pat. — Syll. XI, p. 253. — var. *Rickii* Rehm, 3400
Ascom. exsicc. (1907) n. 1698, Ann. Myc. V (1907) pag. 83. — Peritheciis plerumque arce congregatis, glabris, excipulo fusco-cæ-
ruleo tenuissime parenchymatico, ascis subsenos includentibus;
ascis globosis dein ovoideis, crasse tunicatis, 20-30 \times 18, octosporis;
sporidiis subclavatis, 3-septatis, 10-12 \times 5, hyalinis, una alte-
rave cellula interdum longitudinaliter divisa; paraphysibus, nullis.

Hab. in pagina inf. foliorum Schini weimanniaefolii, São Leopoldo, Rio Grande do Sul Brasiliæ (prof. Rick).

Trib. 3. Englerulaceæ P. Henn.

Syll. XVII, p. 529. — De hac familia cfr. v. Höhnle Fragm. z.
Myk. VII, in Sitzungsb. d. k. Akad. d. Wissenschaft. Wien, CXVIII,
Abt. I, April 1909, pag. 318. Teste hoc auct. *Englerula Maca-
rangæ* P. Henn. esset Perisporiacea *Dimerio* affinis; e contra *Sac-
cardomyces bactridicola* P. Henn. (a quo vix differret *S. socius* P.
Henn.) esset *Ophionectria* proximus.

ENGLERULA P. Henn. — Syll. l. c.

1. *Englerula carneæ* (Ell. et Mart.) v. Höhn. Fragm. z. Mykol. VII, 3401
p. 54. — Ita nuncupanda esset, teste Höhnlio, *Asterella carneæ*
(Ell. et M.) Sacc. — Syll. IX, p. 393.

SCHIFFNERULA v. Höhn., Fragm. Mykol. VII (1909) p. 55 (Etym. a doct. VICT. SCHIFFNER, professore vindobonensi). — Subiculum tenue arcte adnatum. Hyphæ pseudopodiis 1-cellularibus et conidiis sessilibus, septatis præditæ. Perithecia in hyphis pleurogena, fusca, irregulariter globosa, astoma, initio distincte cellulosa, dein histolysis ope subanhista. Ascii a paraphysati, ovoidei, pauci, octospori. Sporidia bicellularia, hyalina.

1. **Schiffnerula mirabilis** v. Höhn. l. c. p. 56. — Subiculo epiphylo 3402 tenuissimo, 1-3 mm. lat., griseo-brunneolo, interdum late confluente, hyphis 6-8 μ . cr., griseo- v. violaceo-brunneis, hyphopodiis alternis, 10-14 \times 8 ovoideo-globosis, continua præditis, ramulis brevibus, lateralibus; conidiis paucis sessilibus, falcatis, 4-cellularibus, brunneolis 40-42 \times 11-12; peritheciis copiosis initio brunneis dein hyalinis, lateralibus, saepe concrescentibus, sessilibus v. breve pedicellatis, tuberculiformibus, 48-76 \times 44-55, astomis; ascis 1-3 in quoque perithecio, a paraphysatis, octosporis 24-36 \times 20-28, muco obvolutis; sporidiis congregatis, constricto-1-septatis, 19-24 \times 9-12, utrinque rotundatis, hyalinis.

Hab. in foliis Passifloræ spec. in silvis Depok ins. Javæ (V. SCHIFFNER).

2. **Schiffnerula secunda** v. Höhn., Fragm. z. Mycol. X (1910) p. 20. 3403 — Subiculo epiphylo, minuto, subrotundo, nigricante, adnato, ex hyphis 6-8 μ . cr., brunneis, opposito- alterneque ramosis, reticulatisque; hyphopodiis copiosis ovoideis v. subglobosis, 1-cellularibus 11-12 \times 9-12; peritheciis copiosis, tuberculiformibus, subdepressis, 44-88 μ . lat., molliusculis, astomis, contextu unistratioso ex cellulis 8-10 μ . diam., extus prominentibus conflato; ascis a paraphysatis, 2-3 in quoque perithecio, ovoideo-globosis, 35-40 μ . diam., 8-sporis; sporidiis ellipsoideis, hyalinis, medio 1-septato-constrictulis, utrinque rotundatis, 22-29 \times 12-16.

Hab. in foliis Compositæ indet., Sao Leopoldo, Rio Grande do Sul Brasiliæ (THEISSEN).

HYALODERMA Speg. — Syll. IX p. 437, XI p. 270, XIV. p. 465, XVI p. 406.

1. **Hyaloderma Afzeliae** v. Keissl, Ann. Mycol. VII (1909) p. 291. — 3404 Epiphyllum, rarius hypophyllum; mycelio vix perspicuo; peritheciis numero 2-5 aggregatis (rarius singulis), magnis, c. 300-400 μ . diam., globulosis, atris; ascis numerosis, cylindraceis, apice rotundatis, basim versus vix attenuatis, tenuissime tunicatis, c. 85-90 \times

12-15, octosporis, aparaphysatis; sporidiis acicularibus, flexuosis, eseptatis, eguttulatis, hyalinis, c. 80 \times 1.

Hab. in foliis vivis *Afzeliæ* sp. in insula Salomon Bougainville (RECHINGER).

2. **Hyaloderma Gardeniæ** v. Keissl., Ann. Mycol. VII (1909) p. 290. 3405

— Epiphyllum; mycelio vix perspicuo, inter hyphas Meliolæ crescente (an in eis parasitico?), brunneolo, cellulis oblongis composito; peritheciis laxe gregariis, minutissimis, c. 80 μ . diam., globosis, astomis, fatiscentibus, sordide violaceis; ascis paucis ellipticis, basim versus vix attenuatis, tenuiter tunicatis, 8-sporis (?) c. 25-30 \times 7-9; paraphysibus plerumque sparse ramosis, ascis fere duplo longioribus, 45-50 \times 1, hyalinis; sporidiis acicularibus, leviter curvatis, acutis, hyalinis, eseptatis, c. 20-22 \times 1,5-2.

Hab. ad folia viva *Gardeniæ Lanutoo*, in consortio plagarum *Meliolæ* sp. (vel potius parasitans) in insula Samoa Upolu prope lacum Lanuanea (RECHINGER).

3. **Hyaloderma Winklerianum** P. Henn., Engl. Jahrb. XXXVII (1905) 3406 p. 125. — Peritheciis sparsis, v. subaggregatis, in mycelio Meliolæ parasiticis, subglobosis v. ovoideis, baud papillatis, albidis, 100-140 μ . diam., contextu subcelluloso, hyalino, setulis rigidis, erectis, hyalinis, subulatis, 50-80 \times 4-5, vestitis; hyphis repentibus effusis, septatis, ramosis, hyalinis circumdatis; conidiis fusoideis, 40-60 \times 4-6, pedicellatis, 4-guttatis, dein pluriseptatis, submuriformibus; ascis clavatis, apice crasse truncatis, obtusis, 8-sporis, 55-65 \times 12-15, paraphysibus filiformibus, hyalinis, 1,5 μ . cr.; sporidiis conglobatis longe fusoideis, rectis v. curvulis, utrinque acutis, 7-septatis, 35-40 \times 4-4,5, hyalinis.

Hab. in mycelio Meliolæ spec. ad folia Marantaceæ sp., Camerun Africae trop. (WINKLER).

4. **Hyaloderma Uredinis** Raciborski, Bull. Ac. Sc. Cracovie (1909) 3407 p. 376. — Peritheciis hypophyllis confertis griseo-albis, globosis, vertice depresso, 100-150 μ . diam., astomis, appendiculis binis praeditis; cellulis contextus polygonis, 3-8 μ . diam.; deorsum hyphis copiosis, tenuibus, ramosis inter uredosoros penetrantibus, sursum setulis hyalinis, 40-65 \times 6, levibus coronatis; ascis filiformi-paraphysatis, apice rotundatis, deorsum tenuatis, 80-90 \times 12-16, octosporis; sporidiis linearibus utrinque rotundatis, levibus, 55-62 \times 3, parallelis, 20-pluriseptatis, hyalinis.

Hab. in soris uredineis *Sphaerophragmii Mucunæ* ad folia *Mucunæ* sp. in insula Java.

HYALOTHELES Speg., Fungi Paulist., Rev. Mus. La Plata t. XV (1908) p. 11 (Etym. *hyalos* vitrum et *thele* papillæ). — Perithecia pusilla, sparsa, subglobosa, astoma, anhista, thallo mucedineo insidentia. Ascii clavati aparaphysati octospori; sporidia didyma, loculis globosis mox secedentibus coloratis. Genus pulchellum ad *Englerulas* etiam nutans.

1. **Hyalothelæ dimerosperma** Spegazz., l. c., fig. c. — Maculis nullis; 3408 peritheciis hypophyllis sparsis, fuscis, tunica tenuissima præditis glabris, superne rotundatis inferne coarctato-aplanatis, 50-80 μ . diam., substipitatis, thallo vix evoluto insidentibus; ascis 15-30. antice late rotundatis postice cuneatis breviter crasseque pedicellatis 20-30 \times 14-18; sporidiis polystichis e chlorino fuscis, 12 \times 6, loculo supero parum majore.

Hab. in foliis vivis Rubi urticifolii prope Casa do Isolamento, Sao Paulo Brasilia (USTERI).

DIMEROSPORIELLA Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV (1908), p. 10 (Etym. a *Dimerosporio*, cui affinis). — Perithecia minuta ostiolata, anhista, subhyalina, thallo mucedineo insidentia, polyasca. Ascii subcylindracei octospori paraphysati; sporidiis didymis hyalinis. — Est *Dimerosporium* thallo et peritheciis anhistis ostiolatis donatum, inter *Englerulas* adnumerandum. Gen. *Dimerosporiella* v. Höhn. Fragn. z. Myk VIII (1909) p. 22 est omnino diversum et continet *Pisomyxam Amomi* B. et C. — Syll. IX, p. 374. — a typo Cordaeano diversam et potius *Dimerosporio* et *Alinæ* affinem.

1. **Dimerosporiella paulistana** Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV, pag. 11, fig. B. — Maculis nullis v. vix pallescentibus; peritheciis hinc inde gregariis superficialibus pusillis, fuscidulis, glabris, 80 \times 60 umbonato-ostiolatis, 6-12-ascis; ascis elliptico-cylindraceis antice obtuse rotundatis 50 \times 10, basi brevissime noduloseque pedicellatis; paraphysibus paucis longioribus filiformibus obvallatis; sporidiis distichis, levibus minutis, 14-16 \times 4, loculis æquilongis, supero obtuso, infero conideo-acuto donatis, ad septum vix constrictis.

Hab. in foliis languidis Buddlejæ cujusdam, Moca Ipiranga Brasiliæ (USTERI).

*Trib. 4. Perisporieæ Sacc.**Sect. 1. Hyalosporæ.*

CEPHALOTHECA Fuck. — Syll. I p. 36, IX p. 377, XIV p. 465, XVI p. 407.

1. **Cephalotheca prolifica** (Bain.) Sacc. et Trott., *Gliocladium prolifi-* 3410
cum Bainier Bull. Soc. Mycol. Fr. (1910) p. 386 (st. ascophor.), t. XXVI, fig. 2-5. — Peritheciis ex mycelio *Gliocladii* orientibus, conglomeratis, sphæricis usque ad 1 mm. diam., astomis, grosse cellulosis, levibus, isabellinis; ascis pluribus, filamentis brevibus suffultis ovoideo-oblongis, sursum crassioribus, 8-sporis; sporidiis infra monostichis, apice distichis, sphæricis, 25-28 μ . diam. episporio minute verruculoso, intus 1-2-guttulatis.

Hab. in palea uda socio st. conidioph. *Gliocladio* prolico in Gallia.

2. **Cephalotheca Kriegeri** Rehm, Ascom. exs. fasc. 44, n. 1850, Ann. 3411 Mycol. VII (1909) p. 405. — Peritheciis gregariis, globosis, glabris, nigris, poro pertusis, crasse parenchymaticis, cellulis magnis violaceo-fuscis contextis, 250 μ . diam., sessilibus, in mycelio hypharum ramosarum 2 μ . cr. ab aliis rectis 3-4 μ . cr. percursarum insertis; ascis ellipsoideis, 15-20 \times 8-9, in hyphis ramosis tenerimis, 1,5 μ . cr., rosulato-confertis sessilibus; sporidiis fusoideis rectis v. subcurvatis, 8-10 \times 3-3,5, tristichis, intra ascos hyalinis, extra fuscidulis.

Hab. ad chartam albam intra librum putrescentem in silva pr. Königstein Saxonie (KRIEGER).

MICROMASTIA Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 324 (Etym. a *micros* minutus et *mastos* mamilla). — Perithecia superficialia globosa, ostiolo eximie papillata non perforato donata, atra membranacea, subiculo mucedineo parco insidentia. Ascii globosi octospori; sporidiis e globoso trigonis, 1-cellularibus, hyalinis. — Gen. *Anixiae* peraffine sed sporarum fabrica ab omnibus ad huc notis praecipue distinctum.

1. **Micromastia trigonospora** Speg., l. c. p. 325, fig. 6. — Peritheciis 3412 minutis, 120 μ . diam., sparsis eximie mamillatis, glabris, nitidulis, contextu minute parenchymatico olivaceo vix pellucido, basi hyphis radiantibus parcis tenuibus 3-5 μ . cr. ramulosis septulatis

hyalinis cinctis; ascis sæpius globosis 10-12 \vee 8-10, octosporis; sporidiis pusillis 3-3,5 μ . diam., obtuse angulatis e latere compressis, levibus, hyalinis.

Hab. ad culmos aridos putrescentesque Festucæ Hieronymi in cella humida, La Plata, Argentina Amer. austr.

2. *Micromastia fimicola* Syd. in Diedicke Aufzähle. Erfurts Micromyc. 3413 (1910) p. 26 (Jahrb. K. gem. Wiss. Erfurt, XXXVI, p. 146). — Peritheciis sparsis, superficialibus, globosis, membranaceis, atris, glabris, 175 μ . diam., collo 40-50 μ . longo, usque ad 30 μ . lato præditis, basi hyphis tenuibus, hyalinis, septatis, ramulosis cinctis; ascis numerosissimis, globosis v. ovato-globosis, octosporis, 9-10 μ . diam.; sporidiis trigonis, levibus, hyalinis v. hyalino-fuscidulis, 3-5 μ . diam., continuis.

Hab. in fimo Cuniculorum in agro Erfurtensi. — Sporidia in cirrum rubiginosum expulsa.

POLYSPORIDIUM Syd., Ann. Mycol. VI (1008) p. 528 (Etym. polys multus et sporidium). — Perithecia in mycelio tenui, fibrilloso, atro subsuperficialia, applanato-globosa, membranacea, astoma. Ascii ovati v. saccati, polyspori, aparaphysati. Sporidia continua, hyalina, conglobata. Subiculo mycelico et sporidiis continua a *Pompolysporio* Magn. dignoscitur.

1. *Polysporidium Börnmüllerii* Sydow, I. c. p. 528. — Mycelio maculas 3414 minutas $1\frac{1}{2}$ - $1\frac{1}{2}$ mm. latas, atras efformante, fibrilloso, tenui, matrici arcte adnato, ex hyphis repentibus fuligineis septatis varie ramosis et anastomosantibus, crassitudine variis, 6-15 μ . cr., composito; peritheciis paucis aggregatis, applanato-globosis, atris, astomis, membranaceis, 90-140 μ . diam., contextu brunneo, pseudoparenchymatico; ascis ovoideis v. saccatis, apice rotundatis, leniter incrassatis, sessilibus, 38-62 \vee 24-32, sexdecimsporis; sporidiis conglobatis, oblongo-ellipsoideis v. subnavicularibus, continuis, hyalinis, eguttulatis, 18-32 \vee 7-11.

Hab. in caulibus Dianthi orientalis, Kermanschah in monte Kuh Schiris Persiae occid. (TH. STRAUSS, comm. J. BÖRNMÜLLEB).

MELILOPSIS Sacc. — Syll. I p. 68, IX p. 375.

1. *Meliolopsis Boldoæ* Speg., Fungi Chilenses (1910) pag. 24, cum 3415 icon. — Subiculum hypophyllum setulosum, setulis simplicibus 150-250 \vee 6-10; peritheciis sparsis subglobosis parvis, astomis, glabris submembranaceis, collabescitibus, 150-180 μ . diam.; ascis

clavulatis longe tenuiterque pedicellatis aparaphysatis, 50-55 \times 5-6; sporidiis elliptico-navicularibus minutis, hyalinis, 7-8 \times 1,7-2.

Hab. in foliis vivis Boldoæ fragrantis, Cerro Caracol de Concepción Chile Amer. austr.

Sect. 1. Phæosporæ.

CHÆTOMIDIUM Zopf — Syll. I p. 39, IX p. 378.

1. **Chætomidium chlorochætum** Speg., An. Mus. Nac. Buenos Aires 3416

t. XIX (1909) p. 336. — Peritheciis globosis 150-200 μ . diam., primo villo duplice denso vestitis, demum plus minusve glabratiss, atris, astomis v. obsoleto ostiolatis, membranaceis, contextu opaco olivaceo indistincto; pilis minoribus densis tenuibusque, 100-200 \times 2-3, majoribus paucioribus elongatis crassioribus, 500-1000 \times 6-7, simplicibus rectis acutiusculis, dense septulatis, subopacis virescenti-olivaceis; ascis antice obtusiusculis postice longe attenuato-pedicellatis, 40-100 \times 2, aparaphysatis, octosporis; sporidiis levibus 12-14 \times 7-10 utrinque sæpius subapiculatis, grosse 1-guttulatis, diu hyalinis serius fumosis.

Hab. ad culmos aridos putrescentes Festucæ Hieronymi in cella humida, La Plata Rep. Argentina Amer. austr.

2. **Chætomidium magnum** Bain. Bull. Soc. Mycol. Fr. XXV (1909) 3417

p. 194, t. 10, f. 1-5 (sine diagnosi). — Peritheciis subglobosis, c. 550 μ . diam., nigricantibus, astomis, dense piloso-setulosis; setulis filiformibus, e cyaneo nigricantibus aliis rectis, aliis eximie tortuoso-spiralibus, 8,4 μ . cr., peritheci diametro triplo longioribus; ascis clavatis, deorsum sensim et longe stipitatis, apice rotundatis, octosporis; sporidiis subdistichis, e globoso ellipsoideis, 16,8 \times 12-14, (ex iconе perfecte sphæricis!) ex olivaceo brunneo-fuligineis.

Hab. in excremento Canis in Gallia.

3. **Chætomidium phyllactineum** Bain. Bull. Soc. Mycol. Franc. XXV (1909) 3418

p. 193, t. 11, f. 7-10. — Peritheciis confertis, globosis, 200 μ . diam. initio e hyalino fulvis diaphanis, demum nigricantibus opacis, ubique laxe setulosis; setulis divergentibus, 180 μ . long., rectiusculis, simplicibus apice obtusulis, basi dilatatis 14 μ . cr., continuis, rigidulis, fuligineis; ascis numerosis ovoideis vix stipitatis, diametro suo duplo longioribus, octosporis; sporidiis fuscoideo-li-

moniformibus, 19-20 \times 8-9,5.

Hab. in charta emporetica putri in Gallia. — Ob appendiculas *Phyllactiniam* in mentem revocat.

Sect. 3. Hyalodidymæ.

WENTIOMYCES Koord., Botan. Untersuch. (1907) p. 148 (Etym. a prof. F. A. F. C. WENT batavo). — Mycelium hypophyllum effusum, fuscum, septatum. Perithecia aggregata vel sparsa, astromatica, superficialia, globosa v. ovoideo-globosa, astoma, prosoplectenchymatica, membranacea, basi foliis adnata, appendiculata, appendiculis dimorphis; aliis numerosis filiformibus, longis v. longissimis, flexuosis, simplicibus v. rarissime subsimplicibus, dilute fuligineis, apicem versus subhyalinis, apice obtusatis, continuis; aliis brevioribus, rigidis, rectis, paucis, plerumque 4-6; obscure fuligineis, apice divisus, ramulis brevibus v. brevissimis subdilatato-rotundatis. Asci numerosi c. 10-15, fasciculati, cylindraceo-clavati, octospori, aparaphysati, crasse tunicati, apice rotundati. Sporidia subconglobata v. subdisticha, hyalina, medio uniseptata haud constricta.

1. **Wentiomyces javanicus** Koord., l. c. p. 168, fig. 9. — Peritheciis 3419 50-60 μ . diam.; perithecii appendiculis longioribus filiformibus simplicibus 50-160 \times 2-3,5; appendiculis brevibus dichotome ramosis 12-32 \times 4; ascis 24-26 \times 4-6; sporidiis 8-9 \times 2,5 \times 3.

Hab. in foliis emortuis Fici elasticæ prope Penunggalan prov. Kedu ins. Javæ (KOORDERS).

CHILEMYCES Speg., Fungi chilenses (1910) p. 27 (Etym. *Chile* et *myces* h. e. fungus chilensis). — Perithecia superficialia globosa astoma fuscula, mycelio albido insidentia et obvoluta. Asci elongati aparaphysati octospori; sporidiis minutis didymis hyalinis.

1. **Chilemyces valparadisiacus** Speg., l. c. cum icon. — Peritheciis 3420 pusillis membranaceis, 75-100 μ . diam.; ascis subclavulatis breviter pedicellatis, 40-45 \times 6-7; sporidiis distichis ad septum non v. vix constrictis, 9-10 \times 3.

Hab. in foliis emortuis Puyæ chilensis, Cerro Alegre de Valparaiso, Chile Amer. austr.

DIMEROSPORIUM Fuck. — Syll. I p. 51, IX p. 401, XI p. 257, XIV p. 466, XVI p. 408, XVII p. 533.

1. **Dimerosporium Berliniæ** Pat. et Har., Bull. Soc. Mycol. Fr. XXIV 3421 Syll. fung. XXII (V-1912)

(1908) p. 15. — Maculis præcipue hypophyllis, umbrinis, irreguläribus, ex hyphis repentibus, mollibus, septatis, absque hyphopodiiis efformatis; peritheciis globosis, fuscis, 100-140 μ ., contextu anguloso-celluloso, cellulis circiter 8 μ . diam.; ascis ovoideis sessilibus v. nodulo instructis, superne crassissime tunicatis, 62 \times 32, 8-sporis; sporidiis ellipsoideis, una fine leniter attenuatis, pallide fuscis, transverse uniseptatis, levibus, 32-36 \times 8-10.

Hab. in foliis Berliniæ sp., Chari Ungourras Africæ (A. CHEVALIER).

2. **Dimerosporium mindanaense** P. Henn., Hedwigia XLVII (1908) 3422 p. 253. — Maculis mycelii effusis, atris, hyphis repentibus ramosis, fuscis in societate Meliolæ; peritheciis subglobosis, atro-cellulosis, 60-80 μ . diam.; ascis clavatis, obtusis, paraphysatis, 8-sporis, 22-30 \times 8-10; sporidiis subdistichis ovoideis, 1-septatis, constrictis, hyalinis, 9-12 \times 3.

Hab. in foliis Eugeniæ sp., Mindanao, Davao ins. Philippin. mart. 1904 (COPELAND).

3. **Dimerosporium pellicula** Syd., Ann. Myc. V (1907) pag. 339. — 3423 Hyphis repentibus, dense intricato-ramosis, remote septatis, fuligineis, pelliculas aterrimas epiphyllas facile secedentes plerumque totum folium occupantes efformantibus; conidiis sarcinuliformibus 4-8-cellularibus, fuligineis, cellulis singulis ca. 7-9 μ . diam.; peritheciis globosis v. subglobosis, fuligineis, c. 90-110 μ . diam.; ascis variabilibus, fusoideis v. clavatis, plerumque attenuatis, rectis v. saepius varie curvulis, 35-50 \times 12-26 octosporis; sporidiis irregulariter distichis, oblongis, medio 1-septatis, non constrictis, hyalinis, intus nebulosis, 14-18 \times 3-4.

Hab. in foliis Manihotis utilissimæ, in Costa Rica (TONDUZ). — *Dimerosporio pulchro* Sacc. proximum.

4. **Dimerosporium baccharidifolium** Speg., Fungi Paulist., Rev. Mus. La Plata t. XV (1908), p. 14. — Peritheciis erumpenti-superficieibus plerumque epiphyllis, hinc inde laxe gregariis, subglobosis 80-90 μ . diam., membranacea-coriacellis, contextu minute parenchymatico olivaceo, subiculo destitutis, glabris, ostiolatis; ascis sursum crasse tunicatis deorsum breviter crasseque pedicellatis 40-50 \times 15-20, paraphysibus paucis filiformibus obvallatis, octosporis; sporidiis distichis hyalinis, medio uni-septatis constrictulis, 14 \times 4, loculo supero obtusiusculo infero graciliore acutiusculo.

Hab. in foliis vivis Baccharidis cujusdam prope Sao Paulo Brasilia (USTERI) — A *Dimerio baccharidicola* P. Henn. certe di-

versum et cum *Dim. Baccharidis* Sacc. et *D. punctiformi* P. Henn. non comparandum.

5. **Dimerosporium Rickianum** Sacc. et Syd. in Saccardo, Not. Myc. IX, 3425 Ann. Myc. v. V (1907) p. 177. — Subiculo epiphylo, superficiali, maculiformi, fuscо-olivaceo v. subrufo, ex hyphis angustissimis, 4-5 μ . cr., repentibus, rectiusculis, radiantibus obsolete septulatis formato; maculis 2-4 mm. latis v. confluendo amplioribus; peritheciis in subiculo subsuperficialibus, gregariis, minutissimis, globulosis, 60-80 μ . diam., astomis, verticeque minute sinuose dehiscentibus; contextu minute celluloso, membranaceo, rufo-fusco; ascis ovoideis, apice obtusis, basi breviter apiculato-stipitatis, 36 \times 14, octosporis; sporidiis subtristichis, fusoideis, utrinque acutis, rectiusculis, 14-15 \times 4, uniseptatis, non constrictis, eguttulatis, hyalinis.

Hab. in foliis adhuc vivis plantae ignotae (arborescentis?), Sao Leopoldo Brasilie (Pat. J. RICK, communic. H. SYDOW).

6. **Dimerosporium minutissimum** v. Höhn. Fragm. Mykol. VII (1909) 3426 p. 45. — Epiphyllum pelliculas 4-5 mm. latas, nigricantes, tenues, subinde confluentes formans; hyphis 2-3 μ . cr., irregulariter flexis; peritheciis ovoideis, 45-60 μ . diam., tenui-membranaceis, sursum obtuse conoideis, glabris, superficialibus sparsis; hyphis sterilibus erectis, septatis, brunneis, 80 \times 4-5, apice conidium cylindraceum 2-4-cellulare, 18-22 \times 2-4 gerentibus; ostiolo nullo v. obsoleto; paraphysibus filiformibus dein evanidis; ascis paucis ovoideo-ellipticis v. breviter clavatis, infra inflatis, apice incrassatis, octosporis, 21-36 \times 11-13; sporidiis clavulatis, polystichis, hyalinis, bicellularibus, cellula sup. paullo latiore et breviore, rectis curvulive, utrinque rotundatis, 12-14 \times 3-4, extus submucosis.

Hab. in foliis arborum, socia *Asterina consimili* in Horto botanico Buitenzorg ins. Java. — *D. subpilosum* affine.

7. **Dimerosporium Adianti-curvati** Rehm, Ann. Mycol. V (1907) p. 522. 3427 — Peritheciis in maculis hypophyllis fuscо-nigricantibus oblongis, ca. 1 cm. long., 0,5 cm. lat., ex hyphis Meliolae cujusdam centrifugis formatis gregariis, sessilibus, globulosis, atris, glabris, 60-80 μ . diam., parenchymatico-contextis ad basim hyphis simplicibus fuscidulis affixis; ascis ovalibus, apice crasse tunicatis, 30-35 \times 10-12 octosporis; sporidiis oblongo-clavatis, rectis, hyalinis, non constrictis, 12 \times 3, 2-3-stichis; paraphysibus tenerrimis, ramulosis.

Hab. in fronde *Adianti curvati*, Sao Francisco, Brasilia

(ULE comm. Dr. PAZSCHKE). — Ab affini *Dim. tropicali* sporidiis angustioribus, non constrictis dignoscendum.

8. **Dimerosporium apertum** Syd., Engler's Bot. Jahrb. 45. Bd. (1910) 3428 p. 263. — Peritheciis in mycelio Meliolæ parasiticis; mycelio tenui, parce evoluto, ex hyphis tenuibus flavidis v. hyalino-flavis ramosis 3-4 μ . cr. composito; peritheciis gregariis, globosis, glabris, atris, 90-140 μ . diam., centro poro subrotundo distincto apertis; ascis clavatis, apice rotundatis, sessilibus, 35-45 \times 8-11, octosporis; sporidiis distichis, subfusiformibus, medio 1-septatis constrictisque, utrinque leniter attenuatis, hyalinis v. subhyalinis, 12-14 \times 3,5-4; paraphysibus numerosis, hyalinis, filiformibus, ascis superantibus; pycnidii forma, magnitudine et structura perithecia æmulantibus; pycnidiosporis continuis, ovatis v. ellipsoideis, hyalinis, 4-5 \times 2-3,5.

Hab. in mycelio Meliolæ cuiusdam in foliis Rhynchosporæ sp. — Africæ trop. Germaniæ (BUSSE). — *Dimerosp. meliolicolæ* affine. Meliola videtur *Mel. amphitrichæ* similis.

9. **Dimerosporium appendiculatum** Earle, Bull. of the New York Bot. Gard. (1904) p. 303. — In mycelio Asterinæ parasiticum; mycelio proprio parco ex hyphis pallidis, 3 μ . cr., agglutinatis constante; peritheciis globosis, 70-100 μ . diam., molliusculis, contextu e celulis 6-8 μ . diam. formato, appendicibus seu setis 12-20 curvatis, atro-fuscis, opacis, obtusis, 30-40 \times 4 armato; ascis fasciculatis, late clavatis v. anguste obovatis, stipitatis, 8-sporis, 35-50 \times 10-12; sporidiis inordinatis, pallide fuscis, cylindraceis, æqualiter 1-septatis, vix constrictis, 14-16 \times 4.

Hab. parasiticum in Asterina Sidæ ad folia Sidæ carpinifoliæ, Porto Rico (HELLER) et Jamaica (EARLE).

10. **Dimerosporium Balladynæ** Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 373. — Hyphis brunneis, septatis, 2-3 μ . cr., hyphopodiis et setis parentibus, sed hinc inde protuberantiis præditis; irregulariter flexis, crebro ramosis, in subiculo Balladynæ parasiticis; peritheciis atro-brunneis, globosis, sessilibus, tenui-tunicatis astomis, 95-120 μ . diam.; ascis tereti-clavatis, curvulis, 40-48 \times 12-14, apice acutato-rotundatis, tenui-tunicatis, octosporis; paraphysibus genuinis nullis sed tantum hyphis brevissimis coalitis; sporidiis bicellularibus, levibus, 11-13 \times 4-5, cellulis inæqualibus, membrana brunnea.

Hab. in subiculo Balladynæ Medinillæ pr. Salak ad Buitenzorg ins. Javæ.

DIMERIELLA Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV (1908) p. 12 (Etym. a *Dimerio* cuius est analogum genus). — Subiculum parcum. Perithecia subglobosa, astoma, setulosa. Sporidia didyma, hyalina, octona. — A gen. *Dimerosporio* dignoscitur imprimis peritheciis setulosis. — *Dimerosporia* plurima descripta sec. cl. SPEGAZZINI huc ducenda, e. gr.: *Dimeriella dubiosa* (Speg.), *D. Asterrinarum* (Speg.), *D. guarapiensis* (Speg.) *D. solanicola* (B. et C.), *D. Elliotti* (A. L. Smith), *D. coronata* (Speg.), *D. Meyeri-Hermannii* (P. Henn.). — Auctore cl. Spegazzinio, l. c. p. 13, gen. n. *Phæodimeriella* Speg. a *Dimeriella* dignoscendum est sporidiis coloratis et amplectitur imprimis: *Ph. Engleriana* (Henn.), *Ph. hamata* (Penz. et Sacc.), *Ph. cetotricha* (Pat. et Har.) *Ph. tasmanica* (Massee), *Ph. occulta* (Rac.) etc.

1. **Dimeriella hirtula** Spegazz., l. c. fig. D. — Maculis nullis sed matrice tota plus minusve fuscescenti; peritheciis superficialibus perpusillis subhemisphaericis 60-90 μ . diam., laxe gregariis, subiculo parcissimo insidentibus, nigris, 9-12 setulis 1-2-cellularibus acutis rigidulis 20-30 \times 4-5 adpersis, membranaceis, contextu parenchymatico fuligineo parum distincto; ascis a paraphysatis, obovatis, 35-40 \times 15-18, octosporis subsessilibus; sporidiis distichis v. subconglobatis medio uniseptatis 14 \times 5, loculis isomacris, conoideis, acutiusculis.

Hab. in foliis vivis *Baccharidis* sp., Ipiranga até Moça Brasiliæ (USTERI). — Species *Dimerosporio punctiformi* P. Henn. certe peraffinis, satis tamen distincta videtur.

2. **Dimeriella horridula** Syd., in Theiss. Ann. Mycol. VII (1909) p. 352. 3432 — Epiphylla, maculas rotundatas 2-5 mm. latas efformans; mycelio parce evoluto, ex hyphis flexuosis septatis fuscidulis 3,5 μ . cr. composito; peritheciis gregariis globosis, astomis, demum depresso, superficialibus, 75-105 μ . diam., praecipue basi v. in parte inferiore pilis longissimis rectis v. subrectis fuscis parce septatis 100-160 μ . long. et 4-5 μ . cr. dense obsitis; ascis cylindraceo-clavatis, apice obtusis, sessilibus v. brevissime noduloso-stipitatis, 8-sporis, 24-34 \times 8-11; sporidiis distichis, oblongo-ellipsoideis, primo 4-guttulatis, dein medio 1-septatis, non constrictis, hyalinis, 8-11 \times 2,5-3; paraphysibus filiformibus, simplicibus, hyalinis, c. 1,5 μ . crassis..

Hab. in foliis vivis *Baccharidis* sp., São Leopoldo Rio Grande do Sul, Brasilia.

3. **Dimeriella uncinata** Theiss., Broteria (1910) pag. 21. — Maculis 3488

epiphyllis, nigerrimis, opacis, 2-4 mm. diam. vel confluentibus; peritheciis globosis, atris, ubique sparsis, contextu fuligineo parenchymatico, 80-110 μ . diam., circum circa setulis brevibus fortiter uncinato-recurvatis, læte fuscis, basi nigrescenti suffultis, 14-18 μ . altis (extensis 24-28 μ . longis) 3-4 μ . cr., obsitis; ascis ellipsoideo-cylindricis, 18-26 \times 5-6; sporidiis brunneolis, distichis, 1-septatis, 6-7 \times 2-2,5, cellulis subæqualibus.

Hab. in foliis Cestri lanuginosi epiphylla, Sao Leopoldo, Rio Grande do Sul Brasiliæ.

Sect. 4. Phæodidymæ.

DIMERIUM Sacc. et Syd. — Syll. XVI p. 410, XVII p. 537.

1. **Dimerium elegans** Syd., Ann. Mycol. VII (1909) p. 174. — Epi- 3434 phyllum, plagulas orbiculares 1-3 mm. latae atras elevato-discoideas velutinas efformans; peritheciis 10-30 in quaque plagula dense aggregatis, sæpe concentrice dispositis, globosis, atris, nitidis, astomis, demum centro leniter collabescens, 200-275 μ . diam., basi hyphis mycelicis numerosissimis radiantibus atris, haud ramosis parce septatis, usque ad 350 μ . longis, 8-11 μ . crass. ubique cinctis; ascis clavatis, apice rotundatis, basi in pedicellum attenuatis, 100-140 \times 18-22, 4-sporis; sporidiis monostichis, ellipsoideis, utrinque rotundatis, primo continuis hyalinis, dein medio 1-septatis, fuligineis, non constrictis, 21-30 \times 10-14; paraphysibus numerosis, hyalinis, crassiusculis (3-4 μ .).

Hab. in foliis Pasaniæ cuspidatæ Kura-mura Tosa Japoniæ (YOSHINAGA).

2. **Dimerium Autrani** (Henn.) Sacc. et Trott. *Dimerosporium Autrani* 3435 Henn. in Bull. Herb. Boiss. (1893) p. 116, t. V, f. 15. — Mycelio epiphyllo, crustaceo nigro, maculis rotundatis sæpe confluentibus e filis ramosis fuligineis constanti; peritheciis e mycelio erumpentibus, gregariis, globosis, atro-fuscis, rugulosis, usque ad 90 μ . diam.; ascis obovoideis, hyalinis, subsessilibus, octosporis, 30-42 \times 24-28; sporidiis distichis, ellipsoideis v. subclavatis, medio 1-septatis, leviter constrictis, utrinque obtusis, subfuscis, 17-21 \times 7-9.

Hab. in foliis vivis Canthii Schimperiani pr. Ghinda in Erythræa Afr.

3. **Dimerium crustaceum** (Theiss.) Sacc. et Trott. *Dimerosporium crustaceum* Theiss., Broteria (1910) p. 20. — Maculis nigris, ve-

lutinis, minutis, 1-2 mm. diam. in epiphylo dispersis, membranaceo-crustaceis, cohærentibus, ex hyphis densissime contextis, brunneis flexuosis, septatis, 3-4 μ . cr., ramosis formatis; hypharum articulis saepius pseudopodia alterna, flaccide pendula, ramuliformia, oblonga, stipitata 6-8 \approx 2,5-3, passim perithecia nova generantia emittentibus; peritheciis parenchymaticis rhomboideo-cellulosis opacis e globoso subpiriformibus, nudis, 70-90 μ . diam., hyphis subiculi cinctis; ascis numerosis, primitus globosis 25-30 μ . diam., dein elliptico-extensis, 35-42 \approx 8-9; sporidiis conglobatis, 1-septatis, cellulis subinæqualibus, demum fuscouscentibus 10-12 \approx 4-5.

Hab. in foliis Rubiaceæ cujusdam, São Leopoldo Rio Grande do Sul Brasiliæ.

4. **Dimerium radio-fissile** Saccardo, Fungi aliquot africani, Bol. Soc. Broteriana v. XXI (1904-1905) pag. 4. — Peritheciis plerumque epiphyllis in soros peregrinos subcirculares, 400-600 μ . diam., junctis, globulosis, astomis, nigris glabris membranaceis, 90-120 μ . diam., mox vertice irregulariter dehiscentibus et sub pressione statim in lacinias numerosas radiatim fissis et tunc usqua ad 200-220 μ . dilatatis; ascis e globoso ovoideis, basi obtuse apiculatis, 30-45 \approx 25-30, octosporis, paraphysibus filiformibus densis, hyalinis obvallatis; sporidiis didymis, constrictis, 18-21 \approx 8-11, utrinque rotundatis, maturis fuligineo-olivaceis, plerumque 2-guttatis; subiculo sub soris effuso sed non excedente, ex hyphis fuligineis dense reticulatis et hyphopodiis clavulatis formato.

Hab. in foliis adhuc vivis (habitu fere Colei) in ins. S. Thomé Africæ (A. MOLLER). — Peritheciis contextu subprosenchymatico, fuligineo mox sub levi pressione radiatim fisso et subiculo ad soros limitato species mox dignoscitur ab affinibus *Dim. Psilosomaticis* et *Dim. Magnolice*.

5. **Dimerium Guinieri** E. Maire, Ann. Mycol. VI (1908) p. 144, fig. 1, 3438 tab I, fig. 6. — Mycelio ex hyphis tenuibus, ramosis, dilute brunneis, 3-5 μ . diam., composito, saepe hyphas Meliolæ strato plus minusve pseudoparenchymatico circumdante; peritheciis globosis vel ovoideis, 100-110 μ . diam., atro-brunneis, glabris, ostiolo papillato coronatis, contextu tenui, pseudoparenchymatico; ascis a paraphysatis, oblongo-cylindraceis, 43-52 \approx 7-8, octosporis; aecosporis distichis, ochraceo-brunneis, levibus, ovoideo-oblongis 12-13 \approx 4-5, medio septatis nec constrictis, loculo superiore conspicue crassiore.

Hab. in cæspitibus Meliolæ amphitrichæ ad folia Casariæ cujusdam prope São Paulo, Brasiliæ.

6. **Dimerium incrustans** Spegazz., Fungi Paulist., Rev. Mus La Plata 3439 t. XV (1908) p. 13. — Peritheciis pusillis globosis 80 μ . c. cr. membranaceis, contextu parenchymatico subopace fuligineo donatis, subiculo tenuissimo (hyphis 3-4 μ . cr.) fibroso hinc inde noduloso-parenchymatico olivaceo, hyphas Meliolarum v. Asterinarum arcte incrustans; ascis non v. vix obclavulatis 60 \times 14 brevissime nodulosoque pedicellatis apice obtusis, octosporis, paraphysibus paucis filiformibus longioribus immixtis; sporidiis subclavulatis 13-14 \times 5-6, primo hyalinis dein fuligineis, medio septatis non v. vix constrictis, loculo supero obtuso infero conoideo subacutiore.
- Hab.* in subiculo *Asterinæ* cujusdam prope Ipiranga Brasiliæ (USTERI).
7. **Dimerium leptosporum** Spegazz., Fungi Paulist., Rev. Mus. La 3440 Plata t. XV, pag. 14. — Subiculo submucedineo parum manifesto; peritheciis globosis astomis, glabris, parce gregariis, membranaceis, contextu parenchymatico olivaceo; ascis basi brevissime pedicellatis è cylindraceo obclavulatis, aparaphysatis, 40-50 \times 12-15, octosporis; sporidiis fuligineis, distichis clavulatis 15-20 \times 4-5 ad septum leniter excentricum vix constrictis, loculo infero acutiore.
- Hab.* in subiculo *Asterinarum* epiphyllarum ad folia coriaccea circa São Paulo Brasiliæ (USTERI).
8. **Dimerium Gymnosporæ** (P. Henn.) Syd. Ann. Myc. VII (1909) 3441 p. 546. — Ita vocandum *Dimerosporium Gymnosporiae* P. Henn. — Syll. XVI, p. 408.
9. **Dimerium (Dimerosporiopsis) Englerianum** (P. Henn.) Sacc. — Syll. 3442 XVII, p. 537. — Teste cl. v. Höhn (Fragm. z. Mykol. VIII, p. 5-7) esset genuina species *Coleroæ* ipseque auctor addit *Antennariam* Link (= *Antennularia* Reichenb.), *Gibberam* Fries et *Coleroam* Rabenh. unum idemque genus sistere, de qua æquatione vere mirabili liceat interdum dubitare.

ALINA Raciborski, Bull. Ac. Sc. Cracovie (1909) pag. 374 (Etym. prob. e nom. proprio). — Parasitica; mycelio endogeno hyalino, hau-storiis prædicto. Hyphæ superficiales radiantes maculas nigras formantes, hyphopodiis carentes, hinc inde cellulas phialiformes conidio fusoideo terminatas ferentes. Perithecia globosa, breviter pedicellata, astoma, setulis circumdata, contextu unistrato, 4-11 ascos globoso-ovoideos, octosporos includentia. Sporidia bicellularia, brunea. — Generi *Balladynæ* affinis sed vere parasitica, perithecia oligoasca etc.

1. **Alina Jasmini** Raciborski, Bull. Ac. Sc. Cracovia (1909) p. 375. — 3443
 Characteres generis. Amphigena; hyphis superfic. 4-6 μ . cr.; conidiis fusoideis 40-46 \times 6-8, crasse tunicatis, 2-3-septatis; peritheciis 40-50 μ . diam.; pedicellis 5-6 \times 3-4; ascis ovoideis 21-25 \times 14-17, octosporis; sporidiis ovoideis, 12-15 \times 4-5, bicellularibus, cululis inæqualibus, brunneis.

Hab. in foliis Jasmini sp. pr. Buitenzorg ins. Javae.

BALLADYNA Rac. — Syll. XVI p. 411.

1. **Balladyna Medinillæ** Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 373. 3444
 — Amphigena, effusa, nigra, subrotunda, interdum confluens; hyphis brunneo-nigricantibus, copiosis, irregulariter ramosis, 9 μ . cr., hyphopodiis, semiglobosis, 8-12 μ . long., præditis; peritheciis assurgentibus, stipitatis, subglobosis, 40-48 μ . diam.; stipitibus 24-40 \times 7-9; peritheciis stratis quaternis, exterioribus brunneis, demum secedentibus et stratum interius diaphanum relinquantibus; asco unico in quoque perithecio, octosporo aparaphysato; sporidiis diu hyalinis, demum pallide brunneis, tenuiter tunicatis, levibus, bicellularibus, medio constrictis 25-30 \times 13-15, utrinque rotundatis.

Hab. in foliis Medinillæ pr. Salak ins. Javae.

2. **Balladyna amazonica** v. Höhn. Frägm. Myk. IX, p. 7 (1909). — 3445
 Superficialis epiphylla, nigricans, 1,5 mm. long., hyphis radiantis 2-3 μ . cr., olivaceo-fuscis, ramosis, ad pressis; peritheciis sessilibus v. breviter pedicellatis, confertis, numerosis 50-60 \times 36, ovoideis, grosse cellulosis, monoascis; ascis ovoideis 32-40 \times 24-26, octosporis; sporidiis dilute olivaceo-flavidis, 2-cellularibus, 18-21 \times 8,5, cellula super. sæpius latiore et breviore.

Hab. in foliis Cecropiæ sp. præcipue ad nervos crassiores, Jurná Amaz. Brasilie, socia *Auerswaldia Cecropiæ* (E. ULE). — Inter perithecia occurunt, ut videtur, pycnidia subcylindracea 60 \times 25-28, apice sæpe lobulata.

PARODIELLA Speg. — Syll. I p. 717, IX p. 409, XI p. 260, XIV p. 469, XVI p. 412, XVII p. 541.

1. **Parodiella kwangensis** P. Henn., in Fl. du Bas- et Moy.-Congo, 3446 in Ann. Mus. du Congo v. II, fasc. III (1908) p. 225. — Maculis rotundatis v. effusis, fuscis; peritheciis hypophyllis concentrica dispositis ovoideis, astomis, ferrugineo-atris 130-170 μ . cr., mycelio ferrugineo-fusco circumdatis, hyphis ramosis, septatis, 4-10 μ . c. cr., conidiis oblongo-clavatis v. subfusoideis obtusis, 2-septatis

vix constrictis, ochraceis, 35-70 \times 13-18; ascis clavatis vertice rotundato-obtusis, tunicatis, 8-sporis, 90-110 \times 30-40; sporidiis ellipsoideis v. ovoideis, subdistichis v. oblique monostichis, flavobrunneis, medio 1-septatis constrictis, 30-36 \times 14-17.

Hab. in foliis coriaceis arboris cuiusdam, Kisantu Congo, Afr. (VANDERYST) una cum *Helminthosporio kwangensi* P. Henn.

MAIREELLA Syd. in litt. ad Maire R., Ann. Mycol. VI (1908) p. 146 (Etym. a prof. R. MAIRE, mycologo gallico eximio). — Perithecia astoma, globosa, superficialia, cæspitosa, pseudostromate inserta, contextu pseudoparenchymatico, fusco. Asci elongati, octospori, apophysati (?); sporidia didyma brunnea. — Est *Parodiella* composita seu *Othnia* perisporiacea.

1. **Maireella maculans** Syd., l. c. p. 146, fig. 2, tab. I, fig. 1, 3. — 3447
Acervulis peritheciorum 5-7 basi confluentium epiphyllis, centro maculae rotundatae, e pallescente brunneæ, 2-3 mm. diam., singulis incidentibus, 0,4-0,5 mm. diam.; peritheciis nigris, globosis, basi coalitis, astomis, rugulosis, interdum ad basim pilis nonnullis longiusculis, septatis, decumbentibus præditis, ceterum glabris, 150-200 μ . diam., contextu pseudo-parenchymatico, circa 40 μ . crasso; ascis oblongo-clavatis, octosporis, 50-75 \times 18-26; ascosporis distichis v. tristichis, oblongo-lanceolatis, medio septatis et constrictis, 19-25 \times 8-9, cellulis subæqualibus, episporio tenui, diu hyalino v. subhyalino, in spora matura dilute brunneo, minutissime verruculoso v. levi; paraphysibus filiformibus, membrana gelificata; mycelio per contextum folii expanso.

Hab. in foliis vivis plantæ ignotæ, forsitan Compositæ, Alto da Serra prope Sao Paulo Brasiliæ.

Sect. 5. Hyalophragmiæ.

ZUKALIA Sacc. — Syll. IX p. 431, XI p. 268, XIV p. 17, XVI p. 416, XVII p. 543.

1. **Zukalia Gymnopogonis** v. Keissl., Ann. Mycol. VII (1909) p. 291. 3448 — Epiphylla; maculis nullis v. folio vix pallescente; mycelio tenui, laxissimo, subiculum non formante, hyphis brunneis, septatis (cellulis oblongis, raro moniliformibus, quasi chlamydosporas simulantibus), subrectis, sparse fere rectangulariter ramosis, c. 6 μ . lat.; peritheciis magnis fere superficialibus, sparsis, (raro 2-3 sub-

confluentibus), globosis, astomis, nigris, c. 300-500 μ . diam.; ascis cylindraceis, breviter stipitatis, tenuiter tunicatis, 8-sporis, apophysatis, c. 50-55 \times 10; sporidiis subdistichis, subclavatis, hyalinis, eguttulatis, 2-septatis, ad septa non constrictis, c. 15 \times 5.

Hab. ad folia viva *Gymnopogonis scandentis*, in insula Samoa Upolu, in silvis primævis supra Utumapu (RECHINGER).

2. **Zukalia Usteri** Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV, 3449 p. 14. — Peritheciis nigris sparsis hypophyllis 100-200 μ . diam., villo occultis, globosis, glabris, astomis, membranaceis, contextu parenchymatico minuto, densoque olivaceo-fulgineo; subiculo non invento; ascis cylindraceis apice subtruncato-rotundatis, basi breviter cuneato-pedice'latis, 70-80 \times 10, parce paraphysatis; sporidiis subclavulatis rectis v. leniter curvulis, 3-septatis ad septum medium tantum constrictis, hyalinis, loculo supremo obtusiore infimo acutiore, 16-18 \times 4.

Hab. in foliis coriaceis dorso albo-tomentosis, prope Ipiranga Brasilie (USTERI).

3. **Zukalia transiens** v. Höhn. Fragm. z. Mykol. XII (1910) p. 41. 3450
— Peritheciis depresso-globosis, nigris, siccis leviter collabentibus, 200-250 μ . diam., subiculo tenuissimo albo circumdatis, hyphis hyalinis, ramosis, inter se decussantibus 2-4 μ . cr., incidentibus, sparsis; conidiis in subiculo, triradiatis, dilute violaceo-brunneis, magnitudine variis, *triposporioides* interspersis; peritheciis carnosulis, violaceo-brunneis, grosse cellulosis, cellulis 8-12 μ . diam., prope ostium rotundum paullo minoribus ad basim in subiculum sensim abeuntibus; ascis aparaphysatis, fusoideo-clavatis, tenuitunicatis, 80-100 \times 6, basi in stipitem 20 μ . long., crassum productis; sporidiis octonis cylindraceis, leviter curvis, utrinque acutis, 42-76 \times 4, 9-13-septatis, non constrictis.

Hab. in foliis Fici sp. Ost-Usambara Africæ (ZIMMERMANN).

4. **Zukalia parasitans** v. Höhn., Fragm. Mycol. VIII (1909) p. 22. — 3451
Hyphis parcis, recte excurrentibus, diaphane brunneis, septatis, 3 μ . cr., hyphopodiis nullis; peritheciis gregariis verticaliter ovoido-oblongis, subinde breviter stipitatis, nigris, glabris, astomis, 70-100 altis, 46-60 μ . cr., ex cellulis castaneo-brunneis, 6-8 μ . lat., formatis; ascis aparaphysatis, paucis, crasse clavato-fusoideis, apice obtusis, 28-41 \times 14-16, octosporis; sporidiis bi-triseriatis, oblongo-clavatis, hyalinis, basi acutulis, muco obvolutis, 3-4-cellularibus, non constrictis, 14-18 \times 3-3.5.

Hab. parasitica in crusta mycelica *Limacinulae samoensis* ad folia *Fici elasticæ*, *Tjbodas insulae Javæ*.

5. *Zukalia vagans* Spegazz., *Fungi Paulist.*, Rev. Mus. La Plata t. XV, 3452 pag. 14. — Peritheciis hinc inde laxe gregariis, ovatis v. ovato-depressis, minutis, per ætatem non callapsis, medio plus minusve umbonatis, ostiolatis, glabris, membranaceis, contextu parenchymatico minuto, parum distincto donatis, subiculo membranaceo-submucoso tenuissimo late matricem incrustante olivaceo, insidentibus; ascis obclavulatis apice subtruncatis basi brevissime cuneato-pedicellatis 60-70 × 10-14, octosporis; sporidiis hyalinis subbellipsoideis utrinque acutiusculis, rotundatis, 3-septatis, ad septa leniter constrictis, 16-18 × 6-7, rectis v. inæquilateralibus.

Hab. in subiculo *Meliolarum* et *Asterinarum* ad folia viva *Elæagni reflexi* et aliarum arbuscularum in Horto botanico paulistano, Brasilia (USTERI). — var. *brachycarpa* Speg., l. c.: a typo differt peritheciis non umbonatis obsoleteque ostiolatis (an quandoque astomis?) per ætatem collabescientibus, ascis ellipsoideo-subclavulatis, 40-60 × 14-20; sporidiis vix minoribus 14-18, sæpius 16 × 4-6. — In subiculo *Meliolæ* cujusdam ad folia *Coffea arabicae* nec non *Spiræa cantoniensis*, in Horto botanico Paulistano, Brasilia (USTERI).

6. *Zukalia paraensis* P. Henn., in Rehm Ascom. exsicc. fasc. 42, 3459 n. 1800; Ann. Mycol. VI (1908) p. 490 (nomen nudum).

Hab. in pag. sup. foliorum *Anacardii occidentalis*, Pará Brasilie (C. F. BAKER). — *Zukalia dimerosporoides* (Speg.) Sacc. — Syll. IX, pag. 434 — teste v. Höhnel esset species *Gibberellæ*; observandum tamen contextum ejus, sec. cl. Spegazzini, esse *atrofuligineum* a *Gibberella* abhorrentem.

Sect. 4. Phæophragmiæ.

- PERISPORIUM** Fr. — Syll. I p. 55, IX p. 412, XI p. 260, XVII p. 544.

1. *Perisporium macrocarpum* Saccardo, Not. Myc. VI, Ann. Myc. 3454 v. III (1905) p. 510. — Peritheciis gregariis v. hinc inde dense confertis, superficialibus, globosis vel leviter depressis, astomis, majusculis 1 mm. diam., carbonaceis, opace nigris, fragilibus, superficie denique minute foveolato-areolatis; contextu subcarbonaceo, atro, parum distincto; ascis? jam resorptis; sporidiis oblongo-

cylindraceis 4-5-articulatis, 40 \approx 9-11, ad septa constrictis, articulis, initio subcuboideis, mox vero globulosis, 9-11 μ . diam., fuligineo-nigricantibus.

Hab. in disco atrato putrescente arboris (Piri?) in agro Tarvisino (Treviso) Ital. bor. Legi cum amico SPAGAZZINI multis ab hinc annis sed, ascis ignotis, descriptionem ejus prætermisi; tamen a generis ceteris speciebus omnino differt præsertim peritheciis majoribus areolatis sporidiis majoribus etc.

2. **Perisporium Armeniacæ** Hollós, Ann. Mus. Nac. Hung. IV (1906) 3455 p. 329, tab. VIII, fig. 2. — Peritheciis superficialibus, gregariis hemisphaericis, astomis, brunneo-nigris, glabris, nitidulis, 300-400 μ . diam.; ascis cylindraceis, breve stipitatis, 4-8-sporis, 54-60 \approx 8-10; paraphysibus filiformibus, ramosis, hyalinis, septatis et guttulatis, compluribus locis incrassatis; sporidiis cylindraceis, rectis v. curvulis, utrinque attenuatis, 3 septatis, ad septa valide constrictis, olivaceo-brunneis, 30-40 \approx 3-4, loculis facile secedentibus, segmentis terminalibus 9-12 \approx 3-4.

Hab. in putamine putrescente *Armeniacæ vulgaris*, keesmét Hungaric. — A *Perisp. funiculato* Preuss diversum.

MELIOLA Fr. — Syll. I p. 60, IX p. 413, XI p. 260, XIV p. 470, XVI p. 413, XVII p. 546.

1. **Meliola Thouiniæ** Earle, Bull. of the New York Bot. Gard. (1904) 3456 p. 308. — Epiphylla, pelliculas tenues nigras 3-6 mm. diam. sepe effusas et indeterminatas formans; hyphis 7 μ . cr., septatis, articulis 12-16 μ . long.; hyphopodiis copiosis, alternis v. suboppositis, subcylindraceis, 14-16 \approx 8-9, cellula basali 3-4 μ . long., superiori ellipsoidea obtusa; hyphopodiis mucronatis, copiosis, oppositis conoideis v. phialiformibus, obtusis, 20 \approx 7; setis parcis, 300-400 \approx 8, rectis, apice acutis, opacis; peritheciis copiosis, collabentibus, ostiolaris, minutis, 110-150 μ . diam. glabris, ex cellulis compactis 8 μ . diam. formatis; ascis ovoideis, breve stipitatis, 40-50 \approx 25, bi-trisporis; sporidiis 4-septatis, cylindraceis, leviter constrictis, obtusis, atro-fuscis, 35-40 \approx 12-14.

Hab. in foliis *Thouiniæ striatæ*, Porto Rico (HELLER). — Affinis *M. stenosporæ* Wint.

2. **Meliola crucifera** Starb., Ascom. Schwed. Chaco-Cordill. Exp., 3457 Arkiv f. Bot. Bd. V (1905) pag. 7. — Maculis epiphyllis, rarius hypophyllis sine ordine sparsis, interdum confluentibus, vase orbiculariter et dendritice determinatis, 1-3 mm. diam., atris; my-

celio facillime secedente melioloideo, hyphis septatis, ramosis, 5-10 μ . latis, composito, hyphopodiis capitatis plerumque oppositis, cylindraceis, cellula basilari discoidea, exteriore saepe curvula; hyphopodiis mucronatis non visis; setis numerosis, etiam sed rarissime ex peritheciis orientibus, erectis, rigidis, opacis, non septatis, saepissime sursum quadrifurcatis, ramulis omnibus ad apicem iterum dichotome furcatis vel alternantibus binis indivisis, binis semel furcatis, interdum ramulis duobus vel tribus indivisis v. uno alterove furcato, omnibus acutatis, primo eleganter recurvatis, denique angulum rectum formantibus, 140-200 \times 8-12; ramulis primariis 7,5-15 \times 5, secundariis 4 \times 2; peritheciis centrum maculæ versus plerumque confertis, primo globosis, mox, ut videtur, col-lapsis, verruculosis, 150-200 μ . diam.; ascis ovoideis, bisporis 63 \times 25, trisporis 76 \times 38; sporidiis 4-septatis, ad septa constrictis, utrinque rotundatis, fuligineis, 38-45 \times 15-17; hyphopodiis capitatis 19-21 \times 9, cellula externa 12-15 μ . long.

Hab. in foliis vivis Melicoccæ lepidopetalæ, Asuncion, Paraguay (MALME). — A *M. furcata* cui affinis, setis et hyphopodiis plane divergit (Cfr. Gaillard, Le genre Meliola, Paris 1892, p. 107, Pl. XIX, fig. 4): etiam a *M. Sapindacearum* Speg. bene diversa secundum figuram apud Gaillard (Soc. myc. 1892, T. XV, fig. 3).

3. *Meliola Andiræ* Earle, Bull. of the New York Bot. Gard. (1904) 3438 pag. 303. — Epiphylla; maculas late effusas brunneas formans; hyphis longis parce septatis, 7 μ . cr., articulis 30-35 μ . long.; hyphopodiis capitatis, oppositis, anguste obovatis, 12-14 \times 8-10; hyphopodiis mucronatis, hinc inde dense confertis ampulliformibus, collo saepe excentrico et curvo, 16-18 μ . longo, cellula basali bre-vissima, 2-3 μ .; setis sparsis, 200-250 \times 7, basi tuberculatis sursum subcuspidatis curvatisque; peritheciis astomis, minutis, 150-200 μ . diam., glabris, demum collabentibus; ascis 2-4-sporis mox diffusis; sporidiis fuligineis, 4-septatis, leviter constrictis, obtusis, subcom-pressis, 35-40 \times 9-12.

Hab. in foliis Andiræ inermis, Porto Rico (HELLER).

4. *Meliola Chamæcrista* Earle, Bull. of the New York Bot. Gard. (1904) p. 304. — Amphigena et caulincola, effusa, pelliculas tenues nigras formans; hyphis late fuscis, inæqualibus, undulatis, 7-8 μ . cr., cellulis 30-35 μ . longis; hyphopodiis capitatis alternis v. spar-sis, irregularibus, subcylindricis, pro more curvatis et circinantibus, 16-25 \times 9-10; hyphopodiis mucronatis non visis; setis raris,

sparsis, 200-250 \times 7, rectis obtuse tenuatis, apice pallidioribus; peritheciis copiosis, sparsis, globosis, minutis, 120-150 μ . diam., contextu tenui subpellucido extus cellulis prominulis 10-12 μ . diam., colliculoso; ascis ellipsoideis, plerumque 4-sporis; sporidiis 4-septatis, pallide fuligineis, cylindraceis, valde constrictis, obtusis, minutis, 30 \times 10-11.

Hab. in foliis caulinibusque Chamæcristæ glandulosæ, Porto Rico (HELLER). — *Affinis M. microsporæ.*

5. *Meliola Yerbæ* Speg., Hongos d. Yerba Mate in Ann. Mus. Nac. 3460 Buenos Aires t. XVII (1908) pag. 115. — Amphigena; plagulis suborbicularibus tenuibus arcte adhaerentibus ambitu effuso-evanescens, atris, glabris, 4-8 mm. diam.; hyphopodiis clavulato-obpiriformibus, nodulosis, alternis, 2-3-cellularibus 25-30 \times 15; peritheciis hypothallo scutiformi insidentibus, hyphis paucis uncinulatis, 80 \times 5-6, cinctis, 200 μ . diam.; ascis mox diffusis, ellipsoideis brevissime pedicellatis, 50-60 \times 35-40, bi-trisporis; sporidiis rectis e latere vix compressulis, 40-50 \times 16-22, utrinque rotundatis, 4-septatis, leviter constrictis, fuligineis, grosse 5-guttulatis.

Hab. ad folia viva Ilicis paraguayensis, Territorio Misiones Argentinæ.

6. *Meliola Theobromæ* F. C. v. Faber, in Arbeit. K. Biol. Anst. Berlin, VII (1909), pag. 220. — Peritheciis superficialibus sphæricis, atris, levibus, glabris, 110-130 μ . diam., mycelio in foliorum superficie effuso nigro insertis, 110-130 μ . diam.; ascis obovato-ellipsoideis, 28 \times 14, octosporis, aparaphysatis; sporidiis ovoideis, continuis, translucidis, 10 μ . longis.

Hab. in pag. super. foliorum Theobromæ Cacao, Camerun Afric. trop. — Crustas atras crassas format. Diagnosis incompleta. Si species jugiter hyalospora esset potius *Meliolopsis*.

7. *Meliola lanigera* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) 3462 p. 327, cum icon. — Plagulis orbicularibus v. difformibus, sparsis 1-5 mm. diam., hypothallo submembranaceo facile a substrato sedente constitutis, hyphis repentibus flexuosis 10-12 μ . cr., densissime intertextis hyphopodiis alternis, clavulatis, sublevibus 24 \times 15 densis auctis, setulis rectis 250-400 \times 10-12, opacis fuligineis vix apice integro subpellucidis ornatis; peritheciis globosis, grosse verrucosis nudis, 200-250 μ . diam.; ascis ellipsoideis brevissime crasseque pedicellatis 55-60 \times 25-30 mox diffluentibus, bisporis; sporidiis subcylindraceis 30-40 \times 10-14, 4-septatis ad septa constrictulis rectis v. leniter curvulis, loculis grosse 1-guttulatis, fuligineis.

Hab. ad folia viva *Lithræa brasiliensis* in dumetis pr. Santa Ana Misiones, Rep. Argentina Amer. austr. (A. LLAMAS).

— Ad apices setularum sæpius conidia fusideo-clavulata, 40-50 × 7-10, 3-4 septulata olivacea inveniuntur.

8. *Meliola quercinopsis* Rehm — Syll. XVI, p. 1125, — var. me- 3463
galospora Rehm, Ascom. Exsicc. fasc. 46, n. 1899, Ann. Mycol. (1910) p. 303. — Hyphis 3 μ. cr.; conidiis fusoides, longe pedicellatis; 5-cellularibus, 20-40 × 5-8; peritheciis glabris, setulis 200 × 5-8, brunneis, simplicibus, septatis basi ornatis; ascis 90-100 × 30, octosporis; sporidiis oblongo-clavatis, 35-40 × 10-12, tristichis, brunneis, 5-locularibus, cellulis extimis minutis, 5-guttulatis.

Hab. in pagina sup. foliorum *Lithræa brasiliensis*, Sao Leopoldo, Rio Grande do Sul Brasiliæ (THEISSEN).

9. *Meliola Mangiferæ* Earle, Bull. of the New York Bot. Gard (1904) 3464 p. 307. — Amphigena, pelliculas nigras, dense velutinas orbicularis, 6-10 mm. diam., demum confluentes formans; mycelii hyphis copiosis intertextis, atro-fuscis 10 μ. cr., cellulis 25-30 μ. long.; hyphopodiis capitatis inæqualiter clavato-oblongis, alternis, 25 × 12-14, cellula basali 6-7 μ. longa, cellula superiore cylindracea subflexuosa; hyphopodiis mucronatis raris subconicis, obtusis, sæpe flexis et irregularibus 25 μ. long.; setis copiosis 600-700 × 11, opacis, sursum tenuatis et sæpe breviter 2-5-dentatis; peritheciis globosis, 200 μ. diam., extus colliculosis; ascis typice 2-sporis, evanescentibus; sporidiis 4-septatis, constrictis, crasse cylindraceis, atro-fuscis, 50-55 × 18-22.

Hab. in foliis *Mangiferæ indicæ* in horto Castleton Jamaicæ (EARLE) et Porto Rico (HELLER). — Peritheciæ colliculi ex peculiaribus cellularum aggregationibus formantur.

10. *Meliola polytricha* Kalchbr. et Cke. — Syll. I, pag. 67. — var. 3465
flexuosiseta Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV, pag. 16. — A typo differt subiculo sat villoso, setulis dense flexuoso-subcircinatis aterrimis, opacis, basim et apicem versus attenuatis; sporidiis subcylindraceis 45 × 18 × 12, 4-septatis.

Hab. ad folia viva *Schinia* cujusdam in Horto botanico paulistano, Brasilia (USTERI).

11. *Meliola glabriuscula* Spegazz., Fungi Paulist. Rev. Mus. La Plata 3466 t. XV, p. 15. — Subiculo tenuissimo plagulas sæpius confluentes ac fere totum epiphyllum obtegentes efficiente; hyphis subopacis crassis 6-8 μ. cr., rectis sæpius oppositis ampulliformibus et piriformibus magis numerosis commixtis nigris fere opacis, setulis

paucis circa singula perithecia radiantibus, molliusculis apice integris, 50-150 \times 6, pellucidis; peritheciis subverrucosis astomis nigris, 150-250 μ . diam., semper glaberrimis; ascis ellipsoideis 45-60 \times 20-30, 2-4-sporis, breviter crasseque pedicellatis; sporidiis subcylindraceis utrinque obtuse rotundatis, 5-locularibus, ad septa leniter constrictis, levibus, subopacis fuligineis, rectis v. leniter subcurvulis e latere sat compressis, 35-40 \times 16-17 \times 12.

Hab. ad folia viva valde coriacea nitidissima (*Photinia* ?), Agua branca, Isolamento prope São Paulo Brasiliæ (USTERI). — Species *Meliola brasiliensi* Speg. peraffinis sed glabritie, hypothallis microthyriiformibus deficienibus setulisque mycelialibus sat distinctis dignoscitur.

12. *Meliola valdiviensis* Speg., Fungi Chilenses (1910) p. 26, cum 8467 icon. — Subiculo orbiculari tenuiter membranaceo calvo, hyphis opposite ramosis hyphopodiis oppositis v. alternis obovatis gibbosis v. sublobulatis; peritheciis globosis in quaque macula 3-8 insidentibus, 200-300 μ . diam., non collabescientibus; ascis bisporis 60 \times 34; sporidiis obtusis ellipsoideis, 4-septatis e latere non v. vix compressis, 48-52 \times 20.

Hab. copiose in foliis *Eugeniae* cujusdam, Bahia de Corral Chile Amer. austr.

13. *Meliola Helleri* Earle, Bull. of the New York Bot. Gard (1904) 8468 p. 307. — Amphigena, pelliculas tenues subindefinitas nigras, 3-6 mm. diam. formans, saepe plus minus confluens; mycelio intertexto pallide fusco, hyphis 7 μ . cr., cellulis 15-18 μ . long., hyphopodiis capitatis alternis v. unilateribus, regularibus, oblongis, 16-18 \times 8, cellula basali curta, 5 μ ., superiori cylindracea; hyphopodiis mucronatis parcis, oppositis v. sparsis, subconicis v. amphulliformibus, saepe irregularibus, truncatis, 18-20 μ . long.; setis parcis 350-450 \times 8, rectis, sursum tenuatis, apice breviter bifidis v. acute 2-pluridentatis; peritheciis globosis 150-200 μ . glabris, ex cellulis 8-10 μ . diam. formatis; ascis evanidis; sporidiis 4-septatis, atro-fuscis, cylindraceis, fortiter constrictis, obtusis, 35-40 \times 11-13.

Hab. in foliis plantæ arboreæ cujusdam forte Myrtaceæ, Porto Rico (HELLER).

14. *Meliola falcatiseta* Speg., An. Mus. Nac. Buenos Aires t. XIX 8469 (1909) p. 327. — Plagulis saepius epiphyllis 0,5-2,5 mm diam., orbicularibus suberustaceis arcte matrici adnatis, grosse denseque villoso-lanatis, nigris; hyphis mycelialibus 10-12 μ . cr. subopacis fuligineis, hyphopodiis 20 \times 15, creberrimis ornatis, setulis erectis

arcuatis acutis 250-500 \times 10-12, subopacis 1-3-septatis apice acutissimis atque subpellucidis arcuatis; peritheciis udis globulosis villo absconditis papillulosis, 120-150 μ . diam., siccis corrugato-collabescentibus glabris atris, contextu submembranaceo grosse parenchymatico atro donatis; ascis paucis ellipsoideis 60 \times 30-35 brevissime crasseque pedicellatis, a paraphysatis; sporidiis cylindraceis 44-48 \times 14-16, rectis v. leniter curvulis, utrinque obtusis, 4-septatis ad septa coarctatulis, loculis saepius grosse guttulatis, fuligineis.

Hab. ad folia viva *Moyæ ferocis* (e *Celastraceis*) Saucelito, Salta Rep. Argentina, Amer. austr.

15. **Meliola zig-zag** Berk. — Syll. I p. 67 — var. **discreta** Starb., 3470 Ascom. Schwed. Chaco-Cordill. Exp., Arkiv. f. Bot. Bd. V (1905) pag. 7. — Peritheciis discretis siccitate collapsis, setis rarissime septatis, leniter undulatis, fere plane, acumine excepto, impellucidis, acutatis, rarissime obtusis, 150-250 \times 8-10; ascis 51 \times 32; sporidiis 44-48 \times 15-18; conidiis nullis.

Hab. in foliis *Cinnamomi* (?) Rio Grande do Sul, Brasilia (MALME). — Conidiis nullis, situ et forma peritheciorum differt.

16. **Meliola heteroseta** v. Höhn., Fragm. Mycol. VIII (1909) p. 13. 3471 Epiphylla, subrotunda, 6 mm. lata, tenuissima, adpressa; hyphis radiantibus digitato-ramosis, atro-viglaceo-brunneis 12 μ . cr.; articulis 28 μ . long.; hyphopodiis unilateralibus v. alternis, bicellularibus, ovato-oblongis, 16-20 \times 11-12; hyphopodiis phialiformibus paucis; setis copiosis, nigris, rigidis, opacis, biformibus: mycelialibus 180-220 \times 8-10, furcatis, perithecialibus cuspidatis 450 \times 12, supra 3-5 μ . cr.; peritheciis sparsis, globosis, dein profunde umbilicatis, grosse cellulosis, ostiolo indistincto; ascis 2-3-sporis, ellipsoideis, basi acutatis, 60-65 \times 26-33, pseudoparaphysibus (ascis abortivis?) intermixtis 100 \times 25; sporidiis parallelis atro-brunneis, oblongis, 5-cellularibus, ad septa valde constrictis, utrinque rotundatis, 44-52 \times 18-22.

Hab. in foliis *Paratropiæ* in silvis Tijbodas Javæ.

17. **Meliola pectinata** v. Höhn., Fragm. Mykol. VIII (1909) p. 14. 3472 — Tenuis, nigricans, rotunda v. oblonga, mm. aliquot lata; hyphis vinoso-brunneis, 8-10 μ . cr., septatis, articulis 24-28 μ . longis, saepe opposito-ramosis, hyphopodiis copiosis, oppositis; hyphopodiis capitatis 20-24 \times 13-16, bicellularibus, cell. inferiori brevi, superiori rotundato-ovoidea, medio poro minuto prædita; hyphopodiis phialiformibus 17-20 \times 8-10, continuis; setis nigris, rigidulis, rectis, acutis; mycelii setis 260-420 \times 12; peritheciis setis 250 μ . long.; peri-

theciis sparsis, globosis, nigris, grosse cellulosis, astomis, 260-300 μ . diam.; ascis ellipsoideis, bisporis, 80 \approx 36-40; sporidiis oblongo-ellipsoideis, utrinque rotundatis, 5-cellularibus, ad septa constrictis, 60 \approx 24, atro-brunneis, pellucidis.

Hab. in foliis vivis Paratropiæ sp., socia *Mel. heteroseta* in silvis Tjbodas Javæ. — *Meliolæ Montagnei* affinis.

18. **Meliola Compositarum** Earle, Bull. of the New York Bot. Gard. 3473 (1904) p. 306. — Epiphylla, pelliculas minutas, 1-2 mm. lat. nigras v. atro-brunneas, sparsas v. subconfluentes formans; hyphis 7 μ . cr., articulis 20-30 μ . longis; hyphopodiis capitatis alternis 25-30 μ . long., cellula basali 8 μ . longa, superiore inæqualiter lobata, 15-20 μ . lat., interdum elongata et 1-septata; hyphopodiis mucronatis oppositis ampulliformibus; setis nullis; peritheciis globosis, 200 μ . diam., apice appendiculis rigidis 6-12 coronatis, appendiculis 80-100 \approx 20 pallidis, apice obtuso abrupte uncinato et saturatiore; ascis sæpius bisporis, mox evanidis; sporidiis cylindraceis v. anguste ellipsoideis, fuligineis, 4-septatis, constrictis obtusis, 45 \approx 14-16.

Hab. in foliis Willughbææ sp. et Eupatoriæ sp. Porto Rico et Jamaica (HELLER et EARLE) et Compositæ sp. in Brasilia (ULE).

19. **Meliola compacta** Earle, Bull. of the New York Bot. Gard. (1904) 3474 p. 306. — Amphigena, crustulas compactas, nigras 1-2 mm. latas formans; hyphis atro-fuscis 7 μ . cr., dense confertis et agglutinatis; setis mycelii nullis; hyphopodiis capitatis numerosis, crebris, 18 μ . longis, cellula basali 8 μ . longa, superiore globosa 10 μ . diam.; hyphopodiis mucronatis non visis; setis peritheciis sparsis 70-100 \approx 6, obtusis, sæpe abrupte 20 μ . infra apicem curvatis, sursum subhyalinis; peritheciis globosis 200-225 μ . diam.; ascis ellipsoideis 4-sporis; sporidiis cylindraceis, compressis, obtusis, 4-septatis, constrictis, atro-fuscis, 40-45 \approx 14 \approx 10.

Hab. in foliis Crossopetali pallentis, Porto Rico (HELLER).

20. **Meliola Usteriana** Rehm, Ann. Mycol. VII (1909) p. 529, Ascom. 3475 Exsicc. fasc. 45, n. 1875. — Mycelio plerumque epiphylo, primitus maculas orbiculares, tenuissimas, arachnoideas, fusco nigrescentes, 1-4 mm. lat. formante, dein totum folium obtegente et nigro-viridulo-decolorante; hyphis mycelii plerumque curvatis, ramosis, septatis, subfuscis, 4-5 μ . lat.; hyphopodiis plerumque alternantibus, 2-cellularibus, cellula superiori subglobosa, inferiore

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brevissima, 12-14 \approx 8-10, creberrimis; hyphopodiis mucronatis oppositis, pallidioribus 15 \approx 5; setis nullis; peritheciis primitus in centro macularum 5-8 arcte congregatis, in mycelio effuso plane dispersis, sessilibus, globulosis, glabris, atris, astomis, e cellulis magnis parenchymatice contextis, cellulis imprimis ad basim conoideis prominentibus, 150-180, siccis umbilicatis verruculosisque; ascis ellipsoideis 30-40 \approx 20, 2-4-sporis; sporidiis oblongis, obtusis, 4-septatis, ad septa subconstrictis, fuscis, cellulis apicalibus 8 μ . longis, inde 3 mediis brevioribus, 30-33 \approx 12-14.

Hab. ad folia *Cordiæ*, Avenida Paulista, São Paulo Brasiliæ (USTERI). — *Mel. conglomeratae* et *arachnoideæ* affinis, sporis minoribus differt. Diagnosis hujus speciei, ab ipso Rehmio data in Ann. Mycol. (1907) p. 523, satis differt.

21. **Meliola Hyptidis** Syd., Ann. Mycol. VIII (1910) p. 36. — Mycelio epiphylo, laxissimo ex hyphis repentibus, varie ramosis fuscis septatis 4-5 μ . crassis hyphopodia alternantia pedicellata ovata vel ovato-globosa 8-10 μ . longa, gerentibus composito; setulis mycelii erectis, rectis, septatis, simplicibus, fuscis, usque 250 μ . longis, 4-6 μ . latis; peritheciis globosis, 85-120 μ . diam., tuberculatis; ascis numerosis, oblongatis, 35-50 \approx 26-30, 2-4-sporis; sporidiis oblongis, utrinque rotundatis, 4-septatis, constrictis, olivaceo-brunneis, 26-32 \approx 9-11.

Hab. in foliis *Hyptidis suaveolentis*, Lamac, Bataan prov. Luzon, Philipp. (E. D. MERRILL).

22. **Meliola caymanensis** Ell. et Ev., in Millspaugh, Public Field Columbian Mus. Bot. ser. II (1900) n. 1, p. 15, t. 49. — Epiphylla; mycelio maculas minutas, vix 1 mm. diam., subrotundas, nigras formante, ramoso-subreticulato; ramis 6-7 μ . diam.; hyphopodiis capitatis globosis, subsessilibus, 8 μ . diam.; hyphopodiis mucronatis ampulliformibus sursum cylindraceo-productis, 7-8 μ . long., non copiosis; peritheciis 200-250 μ . diam., collabescentibus, 2-6 in quaque macula mycelica; ascis obovatis, subsessilibus, 75-85 \approx 20-25, bi-quadrисporis; sporidiis subfasciculatis, oblongo-cylindraceis, 4-septatis, leviter constrictis, 25-30 \approx 11-13.

Hab. in foliis *Pharbitis catharticae* in insula Grand Cayman Antillarum.

23. **Meliola Psychotriæ** Earle, Bull. of the New York Bot. Gard. (1904) p. 308. — Amphigena, saepius epiphylla, pelliculas orbicularis 1-3 mm. diam. formans; mycelio copioso, hyphis fuscis, 7-8 μ . cr., cellulis 25-35 μ . longis; hyphopodiis capitatis alternis,

mycelio valde adpressis, 25 \times 10-11, cellula basali 7-8 μ . longa; hyphopodiis mucronatis oppositis, 16-20 μ . long., subconicis, saepe curvis apice truncatis; setis erectis, 250-300 \times 8, frequentibus, sursum obtuse tenuatis et pallidioribus; peritheciis minutis, 125-150 μ . diam., subcollabentibus, ex cellulis irregularibus 7-8 μ . diam., conflatis; ascis ellipsoideis, bisporis; sporidiis 4-septato-constrictis, ellipsoideis, pallide fuscis, utrinque obtuse tenuatis, 35 \times 13-14.

Hab. in foliis *Psychotriæ* sp. et *Eriothelis fruticosæ* Porto Rico (HELLER). — *M. ambigua* affinis.

24. *Meliola longiseta* v. Höhn, Fragm. z. Mykol. III, Sitzb. k. Ak. 3479 d. Wissensch. Wien Bd. CXVI, Abt. I (1907) p. 100. — Mycelio hypophyllo, tenuissimo, laxo, 1 cm. diam., subrotundo; hyphis tortuosus, atro-vinosus, 8 μ . diam.; hyphopodiis 2-3-cellularibus alternis, breve capitatis 28 \times 12, cellula superiori ovoideo-globosa, varie verrucosa; hyphopodiis mucronatis nullis; setis sparsis atris, opacis, rigidis 800-1000 \times 10-16; peritheciis sparsis, globosis, verrucosis, 200 μ . diam., ascis 2-3-sporis, ovoideis, tenue tunicatis, 50 \times 20; sporidiis æqualiter 5-locularibus, atro-brunneis, oblongo-ellipsoideis, ad septa leviter constrictis, 40-44 \times 18.

Hab. in foliis *Psychotriæ* sp. in insula Samoa (Doct. RECHINGER).

25. *Meliola Alstoniæ* Koord., Botan. Untersuch. (1907) pag. 170. — 3480 Maculis mycelii hypophyllis, rotundato-angulatis v. effuso-confluentibus, atris, setulosis, hyphis repentibus ramosissimis, brunneo-fuscis, pseudopodiis alternantibus ovoideos-clavatis, fuscis, apice obtusis, setulis indivisis, erectis, apice acuminatis, fusco-atris, 180 μ . longis, continuis; peritheciis sparsis globosis, apice rotundatis 127-135 μ . diam.; ascis 2-4-sporis clavatis, apice haud incrassatis, 80-90 \times 30-40; ascosporis fuscis, oblongis, utrinque rotundatis, 2-4-septatis, 32-35 \times 14-14.5 ad septa constrictulis; paraphysibus nullis; conidiis cylindraceo-clavatis, apice rotundatis, fumigatis, 30 \times 7, circ. 9-septatis.

Hab. in foliis vivis *Alstoniæ scholaris* prope Sapuram prov. Kedu ins. Javæ (KOORDER).

26. *Meliola buddleyicola* P. Henn., Hedwigia XLIV (1905) p. 61. — 3481 Maculis mycelii epiphyllis, gregarie sparsis, rotundato-angulatis, atris, 1-2 mm. diam.; hyphis repentibus atro-fuscis, septatis, ramosis, pseudopodiis alternis, ovoideis, 1-septatis, 12-18 \times 7-8 vel corniformibus, 15-22 \times 4-6, atro-fuscis; peritheciis sparsis v. cæspitosis, inermibus, subglobosis in sicco collabescentibus, atro-fu-

scis, membranaceo-cellulosis, pertusis, 100-160 μ . diam.; ascis ellipsoideis v. ovoideis 2-4-sporis; sporidiis cylindraceis utrinque obtusis, 4-septatis, constrictis, atro-fuscis, 25-32 \approx 7-10.

Hab. in foliis Buddleyæ sp. Tarapoto Amazonæ Brasil. —
Mel. inermi cognata.

27. *Meliola funerea* Mac Alp., Descr. New Austral. Fungi, I, p. 104, 3482 t. X, f. 1-6 (Proceed. Linn. Soc. N. S. Wal. 1896). — Mycelio maculiformi plerumque epiphylo, velutino, nigro, suborbiculari, saepe cunfluente, valde conspicuo; hyphis ramoso-intricatis, 8 μ . cr., ex hyphis hyalinis delicatis adpressis, 2 μ . cr. orientibus, setulis fuligineis, rigidis, septatis, curvis, 11 μ . cr., apice acutatis; peritheciis globosis atro-purpureis, minute verrucosis, 310-350 μ . diam.; ascis pro more 4-sporis ovato-fusoideis 90 \approx 45; sporidiis allantoideis v. ellipsoideis, 3-septatis, ad septa constrictis, 54-62 \approx 18-20, e flavo brunneis.

Hab. in foliis Grevilleæ robustæ, N. South Wales Australiæ (MAIDEN).

28. *Meliola patella* Theiss., Broteria (1910) p. 26. — Plagis tenuibus, 3483 nigris, applanatis, 3-5 mm. diam., epiphyllis, discretis; hyphis radiantibus, stipatis, opposito-ramosis, 7-9 μ . cr.; hyphopodiis mucronatis oppositis, ampulliformibus in collum breve protractis; hyphopodiis capitatis magnis, distantibus, 23-32 \approx 17-20; setis nullis; peritheciis glabris, applanato-patellaribus, orbicularibus, margine acuto elevato, centro subumbonatis, numerosissimis, 120-180, contextu radiato microthyriaceo (non vero dimidiatis) poro centrali praeditis; ascis ovoideis, 2-3-sporis; sporidiis rectis v. curvulis, 4-septatis, cellulis æqualibus, fuligineis, ad septa constrictis, utrinque rotundatis (dimensionibus non indicatis).

Hab. in foliis Sebastianiæ sp. et Schini sp., Rio Grande do Sul Brasiliæ.

29. *Meliola Thomasiana* Saccardo, Fungi aliquot africani, Bol. Soc. 3484 Broteriana v. XXI (1904-1905) p. 4. — Peritheciis in soros minutos, subcirculares, gregarios nigricantes, 1 mm. diam., junctis, globulosis, astomis, 200 μ . diam., glabris, demum vertice irregulariter ruptis, setulis filiformibus, acutis, septulatis, atro-fulgineis, 280 \approx 8-9, basi parce cinetis; contextu e cellulis subglobosis, 11-14 μ . diam., fulgineis formato; subiculo repente ad soros limitato, filiformi, septato, ramoso, hyphopodiis capitatis, eximie 2-4-lobulatis, rufo-fulgineis copiosis praedito; ascis... jam resorptis; spo-

ridiis oblongo-cylindraceis, utrinque rotundatis, 3-septatis, leviter constrictis, atro-fuligineis, 34-36 \times 14-14,5.

Hab. in foliis caulibusque vivis *Elatostematis angolensis* ex Urticaceis, in ins. S. Thomé, alt. 135 m. (A. MOLLER). — *Affinis M. gangliferae*, a qua differt mycelio limitato et maculas effusas haud formante, sporidiis brevioribus etc.

30. *Meliola pennata* v. Höhn., Fragm. Mykol. VII (1909) p. 45. — 3485
Subrotunda, epiphylla, 3-6 mm. diam., confluens; hyphis sterilibus 8-10 μ . cr., arcte adnatis duplicato pennato-ramosis, ramis pro more oppositis; hyphopodiis alternis, 32-36 \times 16, capitulis oblongis, saepe curvis; setis nigris, acute tenuatis, rigidis, basi 9-10 μ ., sursum 8 μ . cr.; setis perithecialibus 200-300 μ . long.; myceliali bus 360-650, copiosis; peritheciis astomis, apice nigris, verruculosis, globosis, non collabentibus, sparsis, 160-200 μ . diam.; ascis ovoideis; sporidiis oblongo-cylindraceis, 4-septato-constrictis, atro-brunneis 50-55 \times 23, raro 24 \times 18.

Hab. in foliis coriaceis arboris cuiusdam, Buitenz. ins. Javae.

31. *Meliola acamptinga* Spegazz., Fungi Paulist., Rev. Mus. La Plata 3486 t. XV (1908) p. 15. — Subiculo plagulas hypophyllas irregulariter orbiculari-angulosas laxissime reticulatas efficiente; hyphis subopacis crassis 6-8 μ . cr., rectis opposite ramosis dense hyphopodiatis, hyphopodiis circa perithecia ampulluli- v. spiniformibus, 20-25 \times 6-7, ambitu saepius clavulatis obtusis, 20 \times 9, atris, setulis paucis circa perithecia tantum evolutis, filiformibus, 500-1500 \times 10 opacis, basi leniter incrassatulis; peritheciis 200-250 μ . cr., subverruculosis, astomis, membranaceis, grosse celuloso-parenchymaticis, nudis; ascis ellipsoideis 60 \times 30, brevissime pedicellatis, mox diffluentibus, bisporis; sporidiis subcylindraceis, utrinque obtuse rotundatis, 5-locularibus ad septa leniter constrictis, levibus, subopace fuligineis e latere leviter compressis, 45-50 \times 18 \times 14.

Hab. ad folia coriacea viva arboris ignotæ, Morca perto de Sao Paulo Brasiliæ (USTERI).

32. *Meliola Mitchellæ* Cooke — Syll. I, pag. 64. — var. *orthopus* 3487 Theiss. Broteria (1910) p. 34. — Maculis obsoletis, amphigenis, 1-3 mm. diam., hyphis gracilibus, brunneis, opposito-ramosis, 6-8 μ . cr., articulis elongatis; hyphopodiis capitatis alternis, brevissime stipitatis, cylindraceis, 18-22 \times 8-9; setis acicularibus rectis; nigro-brunneis, 250-300 \times 8-9, apice 2-3 μ . cr., simplicibus; ascis bisporis, ovoideis, v. ellipsoideis; sporidiis 4-septatis, leniter constrictis, cellulis extimis hemisphæricis, 44-50 \times 16-20.

Hab. in foliis plantæ indet. socia *Seynesia paraguayensi*, Rio Grande do Sul Brasilia.

33. *Meliola dracænicola* Pat. et Har., Bull. Soc. Mycol. Fr. XXIV 3488 (1908) p. 14. — Maculis amphigenis, atris, facile dilabentibus, tomentosis; peritheciis globosis, atris 300 μ . circ. cr.; sporidiis rectis, cylindraceis, brunneis, utrinque obtusis, 4-septatis, constrictis, 46 \times 16; setulis mycelii erectis, atris, gracilibus, apice bis v. ter furcatis, ramulis suberectis v. patentibus, bi-tridentatis; hyphopodiis stipitatis, alternis, rotundatis, 20 μ . long.

Hab. in foliis Dracænæ spec., Brazzaville, Congo (A. CHEVALIER).

34. *Meliola circinans* Earle, Bull. of the New York Bot. Gard. (1904) 3489 p. 304. — Pelliculis irregularibus, velutinis, 5-10 mm. diam. v. late confluentibus, a folio facile secedentibus; mycelio copioso, atro-fusco, anastomotico-ramoso, non conglutinato, subinde noduloso, inæquali, hyphis 6-7 μ . cr., cellulis 16-20 μ . long.; hyphopodiis capitatis copiosis, cylindraceis, rectis, subinde lobatis 16-20 \times 8, cellula apicali subinde arcte inflexo-recurva (circinata) et tunc 16 μ . cr.; hyphopodiis mucronatis raris, ampulliformibus, 16-20 \times 6; setis mycelii copiosis nigris, rectis, cuspidatis, 400-600 \times 8-9; setis perithecialibus 6-8 v. pluribus atro-fuscis, curvatis, obtusulis, 130 \times 6; peritheciis globosis, minutis, 120-150 μ . diam. astomis; ascis mox evanidis sporidiis cylindraceis, utrinque apiculatis, pallide fuscis, diaphanis, 4-septatis, constrictis, 40-45 \times 12.

Hab. in foliis Rhynchosporæ aureæ, Porto Rico (HELLER) Rhynch. dodecandrae et Cyperi sp. in Florida (STURGIS, NASH) et Cladii effusi, Ocean Springs Miss. et Florida (TRACY). — Ab affini *Meliola Cyperi* differt sporidiis subapiculatis nec obtusis, hyphopodiis apice incurvo-circinatis etc.

35. *Meliola substenospora* v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) p. 317. — Subiculo sparso, nigro, crustaceo elliptico saepius acute limitato 1-4 mm. longo, ex hyphis atro-brunneis dense reticulato-ramosis rigidulis septatis, 4-8 μ . cr.; hyphopodiis capitatis copiosis bicellularibus 24 \times 13-16, capitulo rotundo anguloso; hyphopodiis ampulliformibus parcis saepe unilateralibus patentibus 20 \times 8, obliquis, supra obtusis, setis mycelii tantum præsentibus usque ad 360 μ . long., copiosis, opaco-atris, acutis, subinde sursum pallidioribus, septatis, basi 12 μ . latis; hyphis conidiophoris nunc parcis nunc copiosissimis, rectis, diaphanis brunneis, deorsum 5-6-septatis, sursum continuis et subtorulosis

220-340 \times 5-6; peritheciis parcis v. copiosis, globosis, nigris astomis, 200 μ . lat., ascis mox diffusis, ovoideis bi-tri-sporis; sporidiis oblongo-cylindraceis, utrinque leniter acutatis sed rotundatis, 5-cellularibus leniter constrictis.

Hab. in foliis adhuc vivis Phragmitis sp. in Horto Bot. Buitenzorg Javæ. — Affinis videtur *M. stenosporæ*.

36. **Meliola Hercules** v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII 3491 Abt. I (1909) p. 316. — Subiculo epiphylo, sparso, rotundato v. oblongo 2-5 mm. lato, nigro, laxo ex hyphis atro-brunneis septatis solidiusculis dendritico-ramosis 8 μ . cr. formato; hyphopodiis capitatis bicellularibus 20-30 \times 15, capitulo inæqualiter globoso-anguloso; hyphopodiis ampulliformibus, parcis 15- \times 8, setis perithecialibus nullis, setis mycelicis copiosis 130-180 \times 10-12 sursum crassioribus opace atris, bi-tri-septatis, sursum usque ad 30 μ . cr., peritheciis paucis, globosis, nigris 160-200 μ . diam., ex cellulis hemisphaericis prominulis 16 μ . diam., orientibus; ascis ovoideis; sporidiis terno-quaternis, diaphane brunneis, 5-cellularibus ad septa constrictis, 42-44 \times 12-16.

Hab. in pagina sup. foliorum Graminis (Anthistiriæ?) prope Buitenzorg Javæ. — Affinis *M. clavulatae* et *M. Panici*.

Sect. 5. Scolecosporæ.

OPHIOMELIOLA Starb. — Syll. XVI p. 416.

1. **Ophiomeliola Usteri** Spegazz., Fungi Paulist. Rev. Mus. La' Plata 3492 (1908) t. XV, p. 17. — Peritheciis subiculo tenui membranaceo insidentibus, laxe gregariis, lageniformibus, glabris, atris, 100-120 μ . cr., superne in ostiolum crassiusculum subcylindraceum 40-50 \times 35-45 apice subattenuatum denticulato-ostiolatum productis, contextu deorsum parenchymatico sursum prosenchymatico donatis; ascis utrinque attenuatis, apice rotundatis, basi crasse brevissimeque stipitatis 100-125 \times 25-30, octosporis; sporidiis rectis vel leniter sigmoideis, ad septa validiuscule constrictis, 70-80 \times 8-10, 14-16-septatis, olivaceis, loculis minute uniguttulatis.

Hab. ad folia viva Eugeniacæ cujusdam, Ipiranga Moça Brasilia (USTERI).

PSEUDOMELIOLA Speg. — Syll. IX p. 938, XI p. 269, XVI p. 1127. 3493

1. ? **Pseudomeliola collapsa** Earle, Bull. of the New York Bot. Gard.

(1904) p. 309. — Mycelio hyphis tenuibus, agglutinatis, hyalinis, 2,5-3 μ . cr.; peritheciis dense aggregatis, integris, initio lenticularibus dein collabentibus, 100-120 μ . diam., conspicue ostiolatis, ex hyphis radiantibus, agglutinatis, dein crebro septatis, 4-5 μ . diam., formatis, ostiolo 8 μ . diam., margine appendicibus piliformibus, adpressis, radiantibus coronato; ascis obovatis, breviter stipitatis, 30-35 \times 12, aparaphysatis; sporidiis inordinatis, tereti-clavulatis, hyalinis, conspicue 3-guttatis, 12-14 \times 3.

Hab. parasitica in mycelio Meliolæ torulosæ et sp. ad folia Piperis peltati et Mesosphærii capitati, Porto Rico (HELLER). — Species quoad affinitates vere ambigua.

Sect. 8. Dictyosporæ.

CERATOCARPIA Roll. — Syll. XIV p. 474.

1. *Ceratocarpia Theobromæ* F. C. v. Faber, in Arbeit. K. Biol. Anst. 3494 Berl. VII (1909) p. 220. — Peritheciis minutis, globosis, astomis, parenchymaticis, 105 μ . latis, olivaceo-fuscis; ascis subglobosis, ovoidatis, breve stipitatis 30-60 \times 20, aparaphysatis, octosporis; sporidiis oblongis, transverse 2-6-septatis, constrictisque, primo hyalinis, dein melleis, demum olivaceo-fuscis, sæpe guttatis, rostello recto v. curvo plus minus longo utrinque præditis, 15-25 \times 12 (rostris exceptis).

Hab. in foliis Theobromæ Cacao ubi crustas erassas format, Camerun Africæ trop. — Aphides simul aderant copiosi. Sporidia typica muriformia a v. Faber non describuntur; an ergo species hujus generis?

PLEOMELIOLA Sacc. — Syll. I p. 70, XIV p. 17, XVII p. 554.

1. *Pleomeliola Karissæ* Bacc., Funghi Eritrea, Ann. Bot. v. IV (1906) 3495 p. 273, tav. X, fig. 10. — Mycelio amphigeno, crustaceo, atro, facile secedente; peritheciis atris, globulosis superficialibus v. immersis, glabris, rotundatis, 175-200 μ . diam. non umbilicatis; ascis numerosis octosporis 80 \times 14, clavatis, aparaphysatis; sporidiis fuscidulis, ovalibus vel ellipticis, oblique monostichis vel distichis, muriformibus, transverse quinqueseptatis, 31 \times 14.

Hab. in foliis Karissæ edulis ad scaturigines torrentis Mai-Amus pr. As-Nefas, Amasen Erythræa (PAPPI).

ZUKALIOPSIS Henn. — Syll. XVII p. 554.

1. **Zukaliopsis paulensis** Rehm, Ann. Mycol. V (1907) pag. 522. — 3496

— Peritheciis in mycelio epiphylo hypharum, ramosarum, remote septatarum, 4 μ . cr., dilute flavidularum in sicco olivaceo, tenuissimo, longe effuso dispersis, sessilibus, globulosis, poro haud pertusis, membranaceis, dilute nigrifulvis, 250-300 μ . diam., in sicco umbilicatis, glabris; ascis ovalibus, crasse tunicatis, 40-45 \times 20-30; 8-sporis; sporidiis oblongo-ellipsoideis, utrinque rotundatis, transverse 3-7-9-septatis; cellulis modo singulis semel longitudinaliter divisis, hyalinis, 25-30 \times 7-9, 3-stichis; paraphysibus vix distinguendis.

Hab. ad folia Davillæ? São Paulo, Brasilia (USTERI).

Trib. 5. Capnodieæ Sacc. ()***CAPNODIUM** Mont. — Syll. I p. 73, IX p. 438, XI p. 270, XIV p. 476, XVII p. 555.I. *Eu-Capnodium* Sacc. Sporidia fenestrata.

1. **Capnodium cistophilum** (Fr.) Maire Bull. Soc. bot. Fr. LVI (1909) 3497 [edit. 1911] p. CCLXVIII fig. 1. *Antennaria cistophila* Fr. System. mycol. III, p. 230. — Sacc. Syll. fung. I, p. 82. — Mycelio Cfr. Syll. 1. c. — Pycnidii versiformibus, oblongis, cylindraceis corniformibus, lageniformibus, brunneis, levibus, 100-200 μ . long., sporulis I ord. breve ellipsoideis, pro more 1-septato-constrictis, rarius irregulariter 3-septato-muriformibus, 10-12 \times 6-7; sporulis II ord. oblongo-ellipsoideis 1-4-septato-muriformibus 13-17 \times 7,5-8, et latere 5-7 μ . cr.; peritheciis subglobosis, ellipsoideis, cylindraceis v. clavatis, isodiametrico-cellulosis, apice irregulariter dehiscentibus; ascis 8-sporis, a paraphysatis, oblongo-clavatis, 40-50 \times 12; sporidiis distichis v. tristichis, oblongo-ellipsoideis, levibus, brunneis, 3-septatis, ad septum medium constrictis, addito plerumque septo longit. unico, 14-15 \times 5-6.

(*) Quomodo el. G. ARNAUD (Ann. Ecol. nat. d' Agric. de Montpell. IX (1910) p. 240), nullius momenti habito mycelio fumagineo detersibili tam peculiariter et tam perspicuo, censeat tribum *Capnodiearum* delere et ejus elementa cum Sphaeraceis fundere est res omnino stridens et pro incredibilis.

Hab. in ramis Cistorum e. g. C. polymorphi socio Coccide *Lecanodiaspide sardoa*, in Tunisia.

2. **Capnodium stellatum** Bernard, Bull. Dép. Agric. Ind. Néerl. XI 3498 (1907) p. 1, f. 1-24. — Pycnidii (?) stellato-appendiculatis, appendiculis apice digitato-incisis præditis, magnitudine variis, matrici arcte adpressis, non verticalibus, 0,2-0,5 mm. long.; peritheciis ex pycnidii parte superiori hinc inde generatis inæqualiter globulosis; ascis ellipsoideis, obtusis, subsessilibus 45-46 \times 23-24; sporidiis hyalinis dein brunneis, ellipsoideis, 17-22 \times 11-14, 3-4-septato-muriformibus, ad septa non v. vix constrictis.

Hab. in foliis Citri sp. in ins. Java. — Vix *Capnodium*; cum gen. *Actinomma* et *Atichia* comparandum.

3. **Capnodium minimum** Bubák, Bull. Herb. Boiss. 2 sér. VI (1906) 3499 p. 399. — Hyphis atro-olivaceis, crebro septatis, crasse tunicatis, 4-7 μ . cr., varie flexis; peritheciis conicis v. phialiformibus, nigris, confertim aggregatis, 80-150 \times 45-70, atro-castaneis, grosse cellulosis, rostellatis; ascis ovoideis, 55 \times 27, octosporis; sporidiis oblongo-cylindraceis, utrinque rotundatis, 22-29 \times 9, olivaceo-brunneis, 4-5-septatis et verticaliter incomplete 1-septatis, ad septa, præcipue medium, constrictis.

Hab. in foliis petiolisque Potentillæ speciosæ pr. Stirni-do Montenegro.

4. **Capnodium Acokantheræ** Bacc., Funghi Eritrea, Ann. Bot. v. IV, 3500 (1906) p. 273, tab. X, fig. 3. — Mycelio atro, crustoso, epiphylo et ramulos ambiente; hyphis repentibus, moniliformibus, interdum in articulos 17 \times 10 secedentibus, conidia cladosporioidea uni-triseptata gerentibus; peritheciis corniculatis, simplicibus, 210 μ . altis, basi ventricosis, 72 μ . latis, ore setulis hyalinis, erecto-patentibus 17 μ . longis coronato; ascis obovatis sessilibus 50 \times 20; sporidiis olivaceis 2-5-locularibus; loculis sæpe transverse vel longitudinaliter septatis, 13-17 \times 7.

Hab. in foliis Acokantheræ Dorfelsii juxta rivulum are-scentem pr. Medrigien Erythræa.

II. *Capnodina* Sacc. Sporidia hyalophragmia.

5. **Capnodium capsuliferum** Rehm, Ascom. exsicc. n. 1735 et Ann. 3501 Mycol. V (1907) p. 468. — Mycelio epiphylo latissime extenso, pannoso, atro; hyphis primariis subcurvatis, septatis, subhyalinis, repentibus, simplicibus v. ramosis; secundariis exsurgentibus, re-

ctangulo- interdum stellato-ramosis, apice acutatis, fusco-aureis, 5-7 μ . cr., cellulis subrotundis, ad septa valde constrictis, vix guttulatis, scabriusculis; hyphis fertilibus erectis, plerumque simplicibus, 50-150 μ . long., ex articulis oblongis, 20 \times 10 fuscis compositis, ad septa non constrictis, apice peritheciū globosum, dein piriforme sursum angustato-truncatum, demum fimbriato-apertum, fuscum, glabrum, 30-50 \times 20-35 ferentibus; ascis clavatis, 35-40 \times 18, octosporis; sporidiis oblongis, utrinque rotundatis, 3-septatis, rectis curvulive, hyalinis, 18 \times 5; paraphysibus non observatis.

Hab. ad foliā *Tillandsiae* in Horto bot. Sao Paulo Brasiliæ (Noack). — Occurrunt in mycelio cellulæ nonnullæ fusco-umbriæ, 12-15 μ . lat., conidia hyalina, oblonga, 1,5 \times 1 includentes.

6. *Capnodium Usterii* Rehm, Ann. Mycol. V (1907) p. 521. — Myc. 3502
celio primario epiphylo, crustam nigram tenuem ex hyphis conglutinatis + cellulis 10 \times 4 - fuscidulis compositam, late effusam formante, hyphis fuscis simplicibus secundi ordinis, cellulis longioribus, 4-5 μ . lat., demum in filamenta erecta, — 200 μ . long., ad basim c. 30 μ . lat., versus apicem acutata, prosenchymatice conglutinata abeuntibus, rarius simplicibus, septatis, obtusis, fuscis, subramosis, cellulis 15 \times 9, guttulas 2 oleosas includentibus; filamentis erectis secundi ordinis, saepe hyphis divergentibus subscabris, ad apicem saepe hyphis hyalinis divergentibus; peritheciis in latere filamentorum plerumque singularibus vel ad apicem 2-3 coacervatis, 30-130 \times 30-40, stipitatis, elliptico-ovalibus, ad apicem subobtusis, glabris, parenchymatico-fusco-contextis; ascis ellipticis 30-35 \times 9-10, 8-sporis; sporidiis fusiformibus, 3-septatis, rectis, 12-14 \times 3-3,5, hyalinis, distichis; paraphysibus?

Hab. in foliis Myrtaceæ, Sao Paulo Brasiliæ (USTERI). — Ex apice peritheciorum hinc inde evadunt conidia globulosa, hyalina, 3 μ . lat. In mycelio conspicua conidia triposporioidea, quaque parte c. 90 \times 10 e cellulis fuscidulis 7-10 composita. *Capn. pelliculoso* affine sed distinctum.

III. Species dubiæ.

7. *Capnodium hirtum?* Spegazz., Fungi Paulist., Rev. Mus. La Plata 3503
t. XV, p. 17 (1908). — Subiculum tenuiter subcrustaceum membranaceum, dense velutino-hirsutum, nigrum; peritheciis dense constitutis polymorphis 150-500 \times 50-70 cylindraceis v. obclavatis, simplicibus v. ramosis, ubique hyphis brevibus patulis laxe adspersis,

15-25 \approx 3-5; contextu breviter prosenchymatico olivaceo fusco; ascis sporisque desideratis; (tamen ob perithecia hirtula species bene distincta videtur).

Hab. ad folia viva Myrtaceæ cujusdam, Ipiranga, Cambucy Brasilia (USTERI).

8. **Capnodium ? Casuarinæ** Mac Alp. Austral. Fungi Dec. I-II, p. 374, 3504 (Proceed. Linn. Soc. New S. Wal. 1902). — Crustas fuligineo-nigras, ramulos totos obducentes formans, non facile secedens; hyphis repentibus septatis, ramosis, fuligineis, firmis, crasse tunicatis; ceratopycenidiis flavidо-olivaceis v. virentibus, valde elongatis, versiformibus, varie ramosis, curvis, hyphis brunneis obductis, modo basi inflatis et sursum tenuatis, modo aequalibus, ostiolo minuto apice dehiscentibus; sporulis minutis, ovoideis, hyalinis, 3 \approx 1,5.

Hab. in ramis ramulisque Casuarinæ torulosæ Richmond River N. S. W. Australiæ (BAKER).

LIMACINIA Neger — Syll. XIV p. 474, XVI p. 1127, XVII p. 556.

— Sec. cl. MAIRE *Morfea* Roze (aptius Morphea) in Bull. Soc. bot. Fr. XIV (1867) p. 21, est eadem ies ac *Limacinia*, sed auctor nec thecas nec sporas in conceptaculis globosis vidit, nec descripsit, hinc genus Rozeanum inter formas inferiores *Capnodii* vel *Limaciniae* potius adnumerandum est.

1. **Limacinia spinigera** v. Höhnel, Frgm. z. Mykol. III, in Sitzb. 3505 k. Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) p. 100. — Mycelio pelliculam tenuem, griseo-atram arcte adpressam formante; hyphis 4-6 μ . cr., brunneis, guttulatis, valde ramosis, rectis, processibus stellatis, triposporioideis, 4-5-cellularibus, usque ad 80 μ long., interspersis; pyrenidiis longe cylindraceis 20 μ . cr., supra medium fusoideis et 35 μ . cr.; sporulis minutis, oblongo-teretibus; peritheciis pro more verticaliter ovoideis, ostiolo 60 μ . lato aperitis, setis brunneis 50-60 \approx 6, septatis, rectis brunneis cinctis, 80-140 μ . diam.; ascis crasse clavatis, 40-60 \approx 14-20, octosporis; sporidiis bi-triseriatis, 3-4-cellularibus, hyalinis, elongato-ellipsoideis, 15-20 \approx 5-6, utrinque leviter tenuatis, ad septa non constrictis.

Hab. in foliis vivis Sterculiæ populeæ in ins. Samoa (Doct. RECHINGER).

2. **Limacinia Helianthemi** R. Maire, Not. myc., Ann. Myc. vol. IV 3506 (1906) p. 331. — Epiphylla et epiclada, mycelio e floccis aterrimis contexto; hyphis articulatis, subtiliter verruculosis, brunneis; articulis facile secedentibus, sæpe Coniothecii ad instar congrega-

tis; pycnidii longe conoideis, rectis vel curvulis, 150-300 \times 45-70; pycnosporis ovoideo-oblongis, utrinque rotundatis, levibus, brunneis, transverse 2-3-septatis, longitudinaliter uniseriatis vel rassisime biseriatis plus minusve septatis, 10-13 \times 6-7; peritheciis subglobosis, subastomis vel apice ostiolo epapillato pertusis, nec non setis continuis, brevibus, atro-brunneis sparse vestitis, diam. 90-120 μ ; ascis octosporis, eparaphysatis, oblongis, circ. 28-32 \times 10-16; sporidiis distichis brunneis, levibus, oblongis, utrinque rotundatis, transverse 3-septatis, ad septa haud constrictis, 12-18 \times 5.

Hab. in *Helianthemum lavandulifolium*, *Cocco* quodam infestato, Oran Algeriæ.

3. *Limacinia Guajavae* (Bern.) Sacc. et Trott., *Capnodium Guajavae* 3507 Ch. Bernard, Bull. Dép. Agric. Ind. Néerland. XI (1907) p. 21, fig. 37-42. — Mycelio nigro filamentoso, epiphylo; ceratopycnidii corniformibus, sursum tenuatis, simplicibus v. trifurcatis, pedicellatis, sporulis minutissimis hyalinis; peritheciis conico-globulosis v. subpiriformibus, 70-120 μ . diam., sursum 3-6 setulis divergentibus, filiformibus brunneis, præditis; ascis ellipsoideis, obtusis, subsessilibus, 30 \times 20, plerumque octosporis; sporidiis parallele stipatis, fusiformibus, hyalinis, 5-loclaribus, leviter constrictis, rectis v. curvulis, 16-20 \times 5.

Hab. in foliis *Psidii Guajavae* in ins. Java. — Ab affini *L. setosa* (Zimm.) Sacc. differt peritheciis non perfecte globosis, sporidiis 5-loclaribus non 4-loclaribus etc.

LIMACINULA Sacc. — Syll. XVII p. 558 (ut subg.).

1. *Limacinula meliolooides* (Pat.) Sacc. — Syll. XIV, p. 475 (*Limacinia*) — var. *eugeniicola* Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV; p. 16. — Subculo submembranaceo fusco glabrescente; peritheciis hinc inde glomeratis ovato-ellipsoideis v. obclavatis sessilibus v. breviter pedicellatis obscure ostiolatis; ascis cylindraceis aparaphysatis, 60 \times 14; sporidiis ellipsoideo-subclavulatis triseptatis, 17-20 \times 7-8, sepe loculo medio supero septo verticali diviso, primo hyalinis dein olivaceis.

Hab. ad folia viva *Eugeniæ* ejusdam, Ipiranga Moça Brasilia (USTERI). — Species, ut videtur, in tropicis late diffusa et plures descripta; huc forte ducenda *Apiosporium brasiliense* Noack, *Capnodium brasiliense* Puttm., *Limacinia Aurantii* P. Henn. etc.

2. *Limacinula Oleæ* (G. Arnaud) Sacc. et Trott. *Teichospora Oleæ* G. Arn. Ann. mycol. (1910) p. 472. — Mycelio typice epiphyto, ni-

gro, toruloso; peritheciis sphæroideis, minutis 100-120 μ . diam., atris; externis erectis, sessilibus vel varie pedicellatis, tandem ostiolo rotundo superne dehiscentibus; ascis cylindraceo-ovoideis, facile diffusis, plus minusve latis longisque, plerumque 50-60 μ . long., 8-sporis, aparaphysatis; sporidiis subdistichis, fuscis, ellipsoideis, transverse 3-septatis, loculis binis septo longitudinali divisis, plerumque 15-17 \approx 7-9.

Hab. ad ramos Oleæ europæ a *Lecanio Oleæ* vexatos in Gallia australi. — Cum gen. *Teichospora* typico, ad quod dicit cl. G. ARNAUD nil commune habet et toto habitu et biologia recedit. Forma sporidiorum a *Lim. meridionali* imprimis differt. — Præterea cl. G. Arnaud in Ann. Ecole nat. d’Agricult. de Montpell. IX (1910) p. 240 c. ic., peculiari mycelio fumagineo nullius momenti habito, non dubitat *Limaciniam Citri* (Br. et Pass.) Sacc. — Syll XIV, p. 474 — ad *Pleosphaeriam* ducere et *Pl. Citri* (Br. et Pass.) Arn. vocare, quod mihi omnino absonum et repugnans videtur. Ut ejus synonyma censem *Limaciniam Camelliae* (Catt.) et forte *L. Penzigi* Sacc. et tamquam formas conidiophoras: *Fumago Citri* Pers., *Dematium monophyllum* Risso, *Capnodium Citri* Berk. et Desm., *Morfea Citri* Roze, *M. Hesperidis* Roze, *Apiosporium Citri* Br. et Pass.

3. **Limacinula meridionalis** (G. Arnaud) Sacc. et Trott. *Teichospora* 3510 *meridionalis* G. Arn., in Ann. mycol. (1910) p. 471. — Mycelio typice epiphyto, nigro, toruloso; peritheciis atris, sphæroideis, minutis, 100-150 μ . lat., externis erectis, sessilibus v. varie pedicellatis, tandem ostiolo rotundo superne dehiscentibus; ascis teretiovoideis, facile diffusis, plus minus latis longisque, plerumque 50-60 μ . long., 8-sporis, aparaphysatis; sporidiis subdistichis, fuscis, clavato-ovoideis, medio constrictis, transverse 3-septatis, loculis binis septo longitudinali divisis, plerumque 16-17 \approx 7-8.

Hab. ad ramos Cisti monspeliensis a *Lecanodiaspide sardoa* vexati, Citri deliciosa a *Lecanio Oleæ* et *Dactylopio* vexati, Quercus Suberis et Nerii Oleandri a *Lecanis* vexatorum in Gallia australi. — Cum gen. *Teichospora* typico nil commune habet.

4. **Limacinula indica** (Ch. Bern.) Sacc. et Trott., *Capnodium indicum* 3511 Ch. Bern. in Bull. Dép. Agric. Ind. Néerland., VI (1907)- p. 44, fig. 18-29. — Mycelio brunneo, folia laxe investiente; hyphis copiose ramosis et septatis; ceratopycnidiiis longe angusteque ampulliformibus, collo 80-100 μ . longo, parte cylindracea 120-200 \times

35-45 apice fimbriata; sporulis hyalinis ellipsoideis, continuis 5-6 \approx 2-2,5; peritheciis globulosis, 50-200 μ . diam., obtusis, subinde brevi-pauci-setulosis, inter ceratopycnidia nascentibus; ascis ignotis v. jam elapsis; sporidiis ellipsoideis utrinque rotundatis, 3-septatis, 28-33 \approx 15-20, loculis binis centralibus septo uno alterove longitr. divisis, guttulatis, dilute coloratis.

Hab. in pag. super. foliorum Kickxiæ elasticæ in ins. Java, socia *Lecanii* sp.

5. *Limacinula tenuis* (Earle) Sacc. et Trott., *Antennularia* ? *tenuis* 3512 Earle, Bull. N. York Bot. Gard. III (1905) p. 302. — *Epiphylla*; mycelio late effuso, pelliculas tenues olivaceo-brunneas formante; hyphis mycelii valde intertextis, delicatis, tenue tunicatis, subhyalinis, circ. 4 μ . diam., crebro septatis, articulis 12-18 μ . longis, mycelio hinc inde catenulas toruloideas ex cellulis 8-10 \approx 5-6 constante formante; peritheciis copiosis, scarsis mycelio insertis, nigris, globosis, astomis, 200 μ . diam.; ascis ellipsoideis, tenuiter tunicatis, 80 \approx 25, copiose filiformi-paraphysatis; sporidiis inordinatis ellipsoideis, obtusis, hyalinis, 4-8-septatis, 30 \approx 12, septo verticali divisis.

Hab. in foliis Musæ sp., rarius Ingæ veræ, Porto Rico (HELLER). — Conidia triposporoidea adsunt.

6. *Limacinula samoënsis* v. Höhnel, Fragm. z. Mykol. III in Sitzb. 3513 k. Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) p. 101. — Mycelio pannoso, late effuso, facile secedente, brunneo-nigricante; hyphis basalibus dense ramosis, 3,5-5 μ . cr., levibus; hyphis primariis rigidulis, granulosis, parce ramosis, 7-9 μ . cr., in articulos 12-19 μ . longos septatis; hyphis antennarioideis torulosis, ex articulis doliformibus, 16 \approx 8 formatis; peritheciis rotundatis 260 μ . diam., in hyphis antennarioideis sessilibus, nigris, supra umbilicatis, glabris; ascis copiosis, crasse clavatis 110 \approx 24, subaparaphysatis, octosporis; sporidiis distichis, versiformibus oblongis 5-6-septato-muriformibus, hyalinis, serius diaphane brunneolis, 28-36 \approx 9-14.

Hab. in foliis coriaceis in ins. Samoa (Doct. RECHINGER) et in foliis Fici elasticæ in Java (v. HÖHNERL). — Conidia triposporoidea quoque adsunt: radiis 3-6-cellularibus, 35-50 \approx 6. Cfr. etiam v. Höhn. Fragm. z. Mykol. VIII, p. 37.

7. *Limacinula roseospora* v. Höhn. Fragm. z. Mykol. XII (1909) 3514 pag. 37. — Conceptaculis hypophyllis, gregariis v. sparsis, facile secedentibus, siccis disciformibus, umbilicatis, 200-300 \approx 120-160,

subcarnosis, brunneo-atris, pluristratoso-cellulosis, basi in halonem circularem dilatatis; peritheciis inclusis, depresso-globosis, carnosulis, 120-140, μ . alt., 160-180 μ . cr., ostiolo minuto, impresso; ascis apophysatis late clavatis, sessilibus, 85-100 \times 20-28, tenuissime tunicatis, octosporis; sporidiis parallele polystichis, curvulis, cylindraceo-fusoideis, roseis, utrinque obtusulis, 13-15-septatis, ad septa vix constrictis loculo uno alterove longitrorsum diviso, 56-80 \times 7-8.

Hab. in foliis coriaceis vivis arboris ejusdam, Sao Leopoldo Brasiliae (P. THEISSEN in herb. REHM). — Mycelio capnodiaceo deficiente a typo *Limacinia* et *Limacinula* abhorret.

PARACAPNODIUM Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 325 (Etym. *para* prope, h. e. *Capnodio* affine). — Subiculum effusum, submembranaceum ubique denseque hirtum; aculeolis erectis subconoideis simplicibus v. ramulosis sursum attenuatis abrupteque in perithecia subglobosa desinentibus; Ascii numerosi, ovariati, octospori, apophysati; sporidia subfusoidea 3-septata hyalina. — Gen. a *Capnodaria*, *Limacinia*, *Scoria* eximie distinctum quia sit statu conidico, conidiis hyalinis stellatis (*Trinacrium*) ornato, concomitatum.

1. **Paracapnodium pulchellum** Speg., l. c. p. 325, fig. 7. — Late effusum, saepius epiphyllum, aternum, glomerulosum, ex hyphis tortuoso-intestiniformibus coalescentibus crebre septulatis, articulis 2-4 μ . cr., saepius biguttulatis, obscure olivaceis efformatum; stipitibus crebris breviter ramosis 250-1000 μ . long., deorsum crassiusculis atque laxe potentiusque setulosis, apice perithecio subgloboso minuto vix papillulato, 60-80 \times 50-60 ornatus; ascis dense constipatis octosporis, antice subtruncatis crasseque tunicatis postice brevissime noduloseque pedicellatis 24-30 \times 10-14; sporidiis e fusoideo lenissime subclavulatis utrinque obtusulis, 12-14 \times 4-5 ad septum medium constrictulis, loculo tertio supero saepius crassiore, loculis plerumque grosse uniguttulatis, semper hyalinis.

Hab. ad folia viva Ilicis paraguariensis in silvis prope San Pedro Misiones, Argentina Amer. austr. — In pilis stipitum adsunt conidia (*Trinacrium pulchellum* Speg.) radiatim 3-4-ramosa, ramulis hyalinis 1-3-septatis, 10-15 \times 2.

NÆTROCYMBE Körb. Lich. sel. Germ. n. 58 (1858) (Etym. *nætron* fusus et *cymbe* navicula, ob sporidia initio fusoidea), *Coccodinium*

Massal. Esam. comp. p. 55 (1860). — Subiculum spongioso-crustaceum ex hyphis moniliformibus, atris conflatum. Perithecia globosa, papillata, molliuscula, minute pertusa, dein discoideo-collabentia, subiculo inserta v. cincta. Ascii octospori, breves, mucoso-paraphysati. Sporidia fusoideo-oblonga, pluriseptato-muriformia, brunnea.

- 1 *Nætrocymbe fuliginea* Körb. Par. Lich. pag. 442, Rehm, Discom. 3516 pag. 501, *Coccodinium Bartschii* Mass. — Subiculo 2-4 mm. cr., spongioso-crustaceo, brunneo-nigricante, late effuso ex hyphis ramosis, constricto-septatis, 6 μ . cr., formato; peritheciis sparsis v. confertis sessilibus v. infossis, globosis, clausis, 200-300 μ . diam., in osculum minutum rotundum leviter productis, siccis collabentibus, brunneis; ascis clavato-ovoideis, apice rotundatis, 75-80 \times 30, octosporis, paraphysibus tenuissimis ramotis muco jodi ope cærulecente obvolutis; sporidiis oblongis, fusoideis v. clavatis initio 2-4- dein 8-cellularibus, septisque uno alterove longitudinali partitis, brunneis 22-36 \times 9-12, polystichis, articulis 1-guttulatis.

Hab. in rami Alni et Tiliæ in Germania et Austria.

Fam. 2. Sphaeriaceæ Fr.

Sect. 1. Allantosporæ.

ENCHNOA Fr. — Syll. I p. 89, IX p. 442, XI p. 271, XIV p. 478, XVI p. 1128, XVII p. 560.

1. *Enchnoa Verba* Speg., Ann. Mus. Nac. Buenos Aires t. XVII 351⁵ (1906) p. 197 cum icon. — Peritheciis atris hinc inde dense gregariis subcarbonaceis, lenticulari-hemisphæricis, subiculo atro absconditis, serius denudatis ac grosse ostiolato-perforatis, 150-180 μ . diam.; ascis clavatis, longiuscule pedicellatis, aparaphysatis, octosporis 100-110 \times 10, p. sp. 50-60 μ . long.; sporidiis cylindraceis subrectis, hyalinis, utrinque acutiuscule obtusatis, 16-18 \times 4-5,5, minute 2-guttulatis.

Hab. ad ramos decorticatos putres secus rivulum Matto Queimado, Misiones Argentinæ. — Subiculi hyphæ subflexuosæ, septulatae 50-150 \times 5.

2. *Enchnoa alnicola* v. Höhn., Fragm. z. Myk. II, in Sitzb. k. Ak. 3518 d. Wiss. Wien CXV, Abt. I (1906) p. 7. — Peritheciis densiu-

scule sparsis, 1 mm. lat., discoideo-depressis, mollibus, semper tectis et tantum papilla minuta ostiolari erumpentibus, brunneo-lanatis, hyphis violaceo-brunneis, 4-5 μ . cr.; ascis copiosissimis, teneris, stipitatis, clavatis, octosporis, 60-80 \times 6-8; paraphysibus copiosis ascos multo superantibus, filiformibus, 3-5 μ . cr.; sporidiis 2-5-seriato-conglobatis, flavidis, coacervatis brunneolis, allantoideis, curvulis, plasmate saepe bipartito, 8-12 \times 1,5-2,5.

Hab. in ramulis Alni (glutinosæ?) secus Danubium pr. Tulln Austriae. — *Enchnoæ lanatae* affinis.

NITSCHKEA Otth — Syll. XI p. 172, XVI p. 417, XVII p. 561.

1. **Nitschkea crustacea** (Karst.) Sacc. et Trott., *Cælosphaeria crustacea* 3519

Karst., Acta Soc. pro Faun. et Fl. fenn. XXVII, 4 (1906) p. 7.
— Peritheciis confertissimis, exquisite cupuliformibus, atris, nudis, minutissimis; ascis tereti-clavatis, octosporis; sporidiis subdistichis, elongatis, curvulis v. rectis, hyalinis, 8-12 \times 2.

Hab. in ramulis arborum decorticatis prope Palovinca in Siberia (O. LÖNNBOHM).

2. **Nitschkea moravica** Niessl in J. Paul, Verh. naturf. Ver. in Brünn 3520

XLVII p. 21 (extr.). — Peritheciis aggregatis, saepe dense cæspitosis, 0,2 mm. circ. diam., subovoideis, centro collabescendo cupuliformibus, subatris, basi fibrosis; ascis clavatis, longe stipitatis 50-70 (parte spor. 40 μ .) \times 12, octosporis; sporidiis 1-3-stichis, cylindraceis, curvatis, hyalinis, utrinque obtusis uniguttulatis, 10-11 \times 2-3.

Hab. in ramis emortuis Æsculi Hippocastani pr. Schöneberg Bavariae. — A. Nits. Fuckl. (= *Cælosp. cupularis* [Pers.] Karst.) differt peritheciis basi fibroso-floccosis et ascis clavatis.

ACANTHONITSCHKEA Speg., Ann. Mus. Nac. Buenos Aires t. XVII

(1908) p. 116 (Etym. *acantha*, spina et *Nitschkea*). — Perithecia superficialia, e coriaceo submembranacea, in sicco collabescientia, asci aparaphysati, octospori. Sporidia allantoidea, curva, continua, hyalina. — Est quasi *Nitschkea* setigera.

1. **Acanthonitschkea argentinensis** Speg., l. c. p. 117, cum icon. — 3521

Peritheciis hinc inde cæspitosis v. sparsis, cortice insidentibus, e nigro glaucescentibus, 200-250 μ . diam., minute papillatis, in sicco cupulato-collabentibus, basi hyphis paucis radiantibus septulatis, olivaceis, 100 \times 6-7 cinctis, setulisque erectis, rigidulis, acutis, opacis, 50-200 \times 10 conspersis; contextu indistincto opaco, nigro; ascis

clavatis breviter tenuato-pedicellatis, p. sp. 20 ~ 10; sporidiis cylindraceo-allantoideis, utrinque obtusis, 6-8 ~ 2, valde incurvatis, utrinque minute guttulatis, hyalinis.

Hab. ad ramos emortuos subputrescentes Ilicis paraguariensis in Campos das Cuias Argentinæ.

FRACCHIÆA Sacc. — Syll. I p. 93, IX p. 445, XI p. 272, XVI p. 418.

1. **Fracchiæa Romelliana** Berl. Ic. fung. III, p. 26, t. XXXII, f. 3. 3522

— Peritheciis lignicolis, denudatis (an primum cortice tectis?) superficialibus, nigris, in greges parvos collectis, rugulosis, complanatis v. collapsis, centro minute pertusis, $\frac{1}{4}$ - $\frac{1}{3}$ mm. diam.; ascis clavatis sessilibus, 80-90 ~ 15-18, polyporoides; sporidiis valde confertis, allantoideis, innumeris, 7-8 ~ 2, hyalinis, in asco pallidissime lutescentibus, utrinque minutissime 1-guttatis.

Hab. in cortice Rosæ, Upsaliæ Sueciæ (ROMELL in herb. SACC.).

2. **Fracchiæa cucurbitarioides** Speg. — Syll. I, p. 94. — f. **eucalyptina** (Berl.) Speg., An. Mus. Nac. Buenos Aires t. XIX (1909)

p. 333 (sub f. *Eucalypti*). — f. **Pini-insignis** Speg., l. c. p. 333: peritheciis ligno denudato hinc inde gregariis v. sparsis, globoso-depressis, vix papillulatis subcarbonaceis; ascis breviter crasseque attenuatis, 120 ~ 20, aparaphysatis, pleiosporis; sporidiis cylindraceis vix curvulis utrinque rotundatis, 9-10 ~ 1,5, minute 1-guttulatis hyalinis. — f. **Quercus-sessilifloræ** Speg., l. c. pag. 334. — Peritheciis dense coacervatis acervulos atros compactos per rimas corticis durioris erumpentes efficiuntibus; ascis eximie clavulatis 100 ~ 18-20 aparaphysatis pleiosporis; sporidiis cylindraceis leniter curvulis 10-12 ~ 1,5 utrinque obtusis, eguttulatis hyalinis.

Hab. f. 1. prope S. Catalina, f. 2. Tucuman, f. 3. La Plata, in Rep. Argentina Amer. austr.

3. **Fracchiæa affinis** Syd. in De Wildem., Flore Bas-Moy. Congo, 3524

t. III, fasc. I (1909) Extr. p. 16. — Peritheciis superficialibus, solitariis vel paucis aggregatis, globosis, 200-350 μ . diam., mox præcipue in sicco, profunde depresso-cupulatis, atris, non v. vix papillatis, dense minuteque rugulosis, coriaceis v. vix coriaceo-carbonaceis, basi pilis fuscis septatis 5-7 μ . cr. notatis; ascis aparaphysatis, clavatis, longissime stipitatis, p. sp. 20-32 ~ 9-11, pedicello usque ad 50 μ . longo, myriosporis; sporidiis cylindraceis plurimque rectis, hyalinis, continuis, biguttulatis, 5-8 ~ 1.5-2.

Hab. ad cortices Kisantu, Congo (VANDERYST). — A *Fr. multiasca* Pat. differt sporidiis cylindraceis, angustioribus.

4. **Fracchiæa Coniferarum** v. Höhn. Fragm. Mykol. VII (1909) p. 31. 3525

— Peritheciis erumpentibus et peridermio laciniis cinctis, subsparsis, e globoso collabescendo subpatellatis, opace nigris, asperulis, firmis, coriaceis, 350-500 μ . diam., ostiolo obsoleto; cellulis contextus 10-12 μ . diam.; ascis polysporis teneris, apice rotundatis, breviter sensim stipitatis, 100-110 \times 10-16; pseudoparaphysibus, articulatis ascos superantibus obvallatis; sporidiis irregulariter conglobatis allantoideis, curvulis v. rectis, utrinque 1-guttulatis 6-8 \times 1,5, hyalinis.

Hab. in cortice Pinorum pr. Waidhofen Austriæ inf. (P. STRASSER). — Hyphæ ad peritheciæ basi ramosæ, septatae, atro-brunneæ, 6-6 μ . cr. — Peraffinis *Fracchiæa subcongregatae* (B. et C.) Ell. et Ev. — Syll. XVI, p. 419.

NEOZIMMERMANNIA Koord., Botan. Untersuch. (1907) p. 68 (Etym. a Doct. ALB. ZIMMERMANN phytopathologo). — Perithecia stroma destituta, sparsa v. 2-15 inter se alte adnata, in cortice v. in foliorum epidermide immersa, globosa v. globoso-ovoidea vel angulata, ostiolo distincto conoideo breviusculo v. interdum sat longo pertusa, nigra, minuta, glabra, epidermide secedente quandoque sublibera. Asci octospori, paraphysati, breviter stipitati, cylindracei v. cylindraceo-clavati, tunica apice incrassati et haud raro *Gnomonia* modo perforati. Sporidia eximie allantoidea, majuscula, continua, hyalina v. subhyalina, utrinque rotundata. — Genus *Massalongiellæ* proximum.

1. **Neozimmermannia Elasticæ** (Zimm.) Koord. in l. c. pag. 1-121, 3526 tab. I-X et p. 188, *Phomatospora Elasticæ* Zimm. — Syll. XVII. p. 578. — Peritheciis globosis 60-170 v. plerumque 100 μ . diam., ostiolo 80-270 plerumque 80-110 μ . longo; pilis deciduis subhyalinis simplicibus 60-100 μ . longis laxe pilosis; ascis 42-65 \times 7-8; sporidiis 14-19 (plerumque 16-17) \times 3,5-5, dense minutissimeque granuloso-guttulatis.

Hab. in foliis et ramulis emortuis Fici Benjaminæ, F. elasticæ, Heveæ brasiliensis, Asia, Africa et Europa (ubi introducta). — Huc pertinent status conidici qui plantam valde vexant: *Glaeosporium Elasticæ* Cooke et Massee, *Colletotrichum Ficus* Koord.

Sect. 2. Hyalosporæ.

PHTHORA D'Hérelle, Bull. Soc. Myc. Fr. XXV (1909) p. 184 cum tab. IX (Etym. a *ptheiro* destruc). — Stroma pelliculosum, minimum, nigrum, subcorticale, hinc inde carbonaceo-compactum, corticem elevans, cellulose, nigrum, applanatum, forma irregulari. Perithecia superficialia, poro dehiscentia, gregaria, subseriata, membranacea, glabra, sessilia, nigra; frequenter duo aut plura seriatim cohærentia, membrana separationis subinde evanescente et tunc perithecia tubum (?) maxime protensum efformant. Asci sphærici, brunnei, sessiles, aparaphysati; sporidiis simplicibus, sphæricis, hyalinis.

1. **Phthora vastatrix** D'Hérelle l. c. Characteres generis. Perithecia 3527 bene evoluta 50 \times 38, nucleo viscoso. Asci 5-8 μ . diam. octospori. Sporidia minutissima, sphærica, 1-2 μ . diam. hyalina. Hyphæ mycelii ramosæ, septatæ, 2-8 μ . cr. demum nigricantes.

Hab. in libro Coffea arabicae, cui valde noxia, in Guatemala. E diagnosis et figuris l. c. species parum clara et quoad affinitates perdubia.

ASCOSPORA Fr. Summa Veg. Scand. p. 425 (1849), Wint. Krypt. Flora, Pilze II, p. 340 (1887) (Etym. *ascus* et *spora*). — Perithecia initio subcuticularia, minuta, poro pertusa, membranacea subglobosa, ut plurimum mycelio ramoso, adpresso, brunneo insidentia v. cincta. Asci pere exigui, aparaphysati; sporidia ovato-oblonga, hyalina, continua, rarissime basi pseudoseptata. — A *Guignardia* præsertim mycelio sæpe asteromatoideo et minutie dignoscitur. — Ad hoc genus pertinent: **Ascospora Silenes** (Niessl) Wint. (*Asterina Silenes* [Niessl] Sacc. Syll. I, p. 47); **A. melæna** (Fr.) Wint. (*Asterina melæna* (Fr.) Sacc. Syll. I, p. 48); **A. Himantia** (Pers.) Wint. (*Asterina Himantia* (Pers.) Sacc. Syll. I, p. 761); **A. microscopica** Niessl (*Asterina microscopica* (Niessl) Sacc. Syll. I, p. 45).

1. **Ascospora graminis** Lind, Fungi (Micromyc.) from North-East 3528 Greenland (1910) pag. 152, tab. X, fig. 1-2. — Mycelio repente, effuso, subpersistente, hypophyllo, fusco e hyphis torulosis, ramosis, septatis composito; peritheciis superficialibus, applanato-convexus, sparsis 80-100 μ . diam., medio perforatis; ascis fasciculatis, globoso-ovatis, sessilibus, apice crasse tunicatis, aparaphysatis, octo-

sporis, 24-40 \approx 13-17; sporidiis ellipsoideis, inaequilateralibus, granulosis, hyalinis, conglobatis, 15-16 \approx 4.

Hab. in foliis emortuis *Poæ glaucae* et *P. abbreviatæ*, Lille Snæs, Groölandia.

2. *Ascospora Ophiorrhizæ* Raciborski, Bull. Ac. Sc. Cracovie (1909) 3529 p. 389. — Maculis epiphyllis, subrotundis, flavo-virentibus, 2-5 mm. lat.; peritheciis minutissimis, nigris, copiosis, subsparsis, innatis, globoso-depressis, 100-125 μ . lat., 100 μ . alt., sub stromatibus evolutis, non prominulis, tenuiter membranaceis brunneis, circa ostiolum nigris ex mycelii hyphis endogenis ob haustoria punctatis oriundis; ascis fasciculatis, octosporis, apice rotundatis, 50-60 \approx 14, aparaphysatis; sporidiis ovato-oblongis, distichis, hyalinis, continuis, levibus, 10-11 \approx 4-5.

Hab. in foliis *Ophiorrhizæ* spec. in M. Gedeh Javæ.

GUIGNARDIA Viala et Rav. — *Læstadia* Auersw. — Syll. I p. 420, IX p. 577, XI p. 289, XIV p. 516, XVI p. 455 (*).

1. *Guignardia Lini* (Rostr.) Sacc. et Trott., *Læstadia Lini* Rostr., Bot. Tidsskr. XXVIII (1907) pag. 217. — Peritheciis lenticularibus, epidermide tectis, dense sparsis, copiosis; ascis clavato-oblongis, sessilibus 4-8-sporis, 40 \approx 9; sporidiis monostichis, oblongo-fusoides, 12-13 \approx 3.

Hab. in caulinis emortuis *Lini perennis* ad Olgin Lug in montibus Alai, alt. 3000 m. Asia occ. (O. PAULSEN).

2. *Guignardia Pegani* (Rostr.) Sacc. et Trott., *Læstadia Pegani* Rostr., Bot. Tidsskr. XXVIII (1907) p. 217. — Peritheciis nigris, dense gregariis, lentiformibus, depressis, 80-90 μ . latis; ascis ovato-oblongis, curvatis, sessilibus, aparaphysatis, 8-sporis, 60 \approx 24, membrana superne usque ad 10 μ . crassa; sporidiis inordinatis, oblongis, 12-13 \approx 6.

Hab. in caulinis emortuis *Pegani* Harmalæ in Transcapia (O. PAULSEN).

3. *Guignardia Vaccinii* Shear, Bull. Torr. Bot. Club XXXIV (1907) 3532 p. 316. — Pycnidii (*Phoma Shearri* Sacc. et Trott.) plerumque hypophyllis, densiuscule gregariis, 100-120 μ . diam., globosis vel depresso-globosis, subcutaneo-erumpentibus, ostiolo brevissimo;

(*) De nominibus *Læstadia* et *Guignardia* cfr. TRAVERSO, Fl. ital. cryptog. Pyren. p. 375.

sporulis e hyalino melleis, levibus, 10,5-13,5 \times 5-6, obovatis, apice subtruncatis, muco granulato, fere inconspicuo, curvato partim obductis; sporophoris 10-15 μ . longis; peritheciis pycnidia omnino imitantibus; ascis octosporis tereti-clavatis pro more breviter stipitatis, aparaphysatis, 60-80 \times 9-12; sporidiis levibus, hyalinis, ellipsoideis, v. subrhombeis et leniter inaequilateris, 13,5-16,5 \times 6,5-7.

Hab. in foliis Vaccinii macrocarpi, New Jersey, Virginia, Massachusetts, Nova Scotia, Wisconsin Amer. bor.

4. **Guignardia humulina** Bubák, Ann. Mycol. IV (1906) pag. 110. — 3533
Peritheciis subepidermicis, caulinolis, sparsis v. aggregatis, globo-so-depressis, 80-200 \times 50-100, nigris, excipulo 8-20 μ . cr., atro-brunneo, grosse celluloso; ascis tereti-oblongis, rectis v. curvulis, 75 \times 15, breve stipitatis, apice vix tenuatis rotundatisque aparaphysatis; sporidiis ellipsoideo-oblongis, utrinque subconoideis, 13-20 \times 4,5-7,5, hyalinis.

Hab. in caulinibus emortuis Humuli Lupuli prope Tábor Bohemiae.

5. **Guignardia Phytolaccæ** Almeida et Da Camara, Bol. Soc. Brot. 3534 XXIV (1909) p. 11. — *Peritheciis sparsis, plerumque gregariis, innatis, demum erumpentibus globoso-depressis, contextu pseudo-parenchymatico roseo, poro pertusis, 130-150 μ . diam.; ascis subfusiformibus, rectis v. leniter curvulis, sessilibus, octosporis, 60-70 \times 12-15; sporidiis distichis ellipsoideis, rectis, clavatisve et tunc deorsum tenuatis curvatisque, utrinque rotundatis, continuis, minute pluriguttulatis, 17-20 \times 7,5-8, hyalinis.*

Hab. in caulinibus Phytolaccæ decandrae, Choupal prope Coimbra (A. MOLLER). — Ubi contextus sit vere *roseus*, an species Hypocreaceis referenda?

6. **Guignardia rhytismophila** Rehm, Ascom. n. 1650 (1906), Ann. My. col. III (1906) p. 70. — *Peritheciis gregariis, epiphyllis, globulosis, nigris, ostiolo minutissimo prominentibus, demum patellari-collabentibus, 120-130 μ . diam.; contextu parenchymatico fusco; ascis fusoideis, tenuibus 55-60 \times 12, octosporis, aparaphysatis; sporidiis distichis, oblongo-ovoideis, utrinque rotundatis, continuis, utrinque 1-guttulatis, hyalinis, 12-14 \times 5-6.*

Hab. in foliis adhuc vivis Aceris Pseudoplatani a *Rhytisma acerino* infectis pr. Königstein Saxonie (W. KRIEGER). — Perithecia plerumque in zonis albidis circa *Rhytisma* inserta.

7. **Guignardia Molleriana** Da Camara, Bol. Soc. Broteriana, XXV 3536 (1910) Extr. p. 6. — *Peritheciis plerumque epiphyllis, in macula*

indeterminata cinerescenti insidentibus, erumpentibus, sparsis, subglobosis, atris, poro pertusis, 150-180 μ . diam.; ascis tereti-clavulatis, sessilibus, aparaphysatis, 8-sporis, 60-80 \approx 12-15; sporidiis distichis, ovato-oblongis v. ovoideo-fusoideis, hyalinis, continuis, utrinque rotundatis, 18-25 \approx 6-9.

Hab. in foliis *Magnoliae* sp., in horto botanico Coimbra Lusitanæ (A. MOLLER).

8. *Guignardia Lingue* (Speg.) Sacc. et Trott., *Læstadia Lingue* Speg., 3537 Fungi Chilenses (1910) p. 31, cum icon. — Maculis nullis; peritheciis saepius epiphyllis parenchymate innatis, epidermide vix nigricata tectis, lenticularibus, minute ostiolatis, 100-150 μ . diam.; ascis cylindraceis breviter pedicellatis aparaphysatis, octosporis 80-90 \approx 4-6; sporidiis fusoideo-ellipsoideis, 12-13 \approx 3-3,5, saepè guttulatis, hyalinis.

Hab. in foliis siccis dejectis *Perseæ Lingue* prope Ciudad de Valdivia et Cerro Carracol de Concepcion Chile Amer. austr.

9. *Guignardia javanica* Koord., Botan. Untersuch. (1907) pag. 188, 3538 fig. 16, III. — Maculis maximis, indeterminatis, nigrescentibus, peritheciis innatis, laxe gregariis, amphigenis, sed saepius epiphyllis, atris, glabris, 100-200 μ . diam., ovoideis, ostiolo brevi, crassiusculo, epidermidem perforante; ascis paraphysatis, cylindraceis, apice haud incrassatis, 8-sporis, 80-90 \approx 25-30; sporidiis oblongis, hyalinis, continuis, subdistichis, utrinque rotundatis, 17-18 \approx 8,5-10.

Hab. in foliis vivis *Cordiae suaveolentis* prope Purworedjo, insula Java (KOORDERS).

10. *Guignardia Photiniæ* Almeida et Da Camara, Bol. Soc. Brot. XXIV 3539 (1909) p. 11, *Læstadia Photiniae* Alm. et Cam. Revista Agron. (1906) p. 384. — Peritheciis epiphyllis, raro amphigenis, sparsis gregariis, primo tectis, demum erumpentibus, subglobosis, poro pertusis, 150-200 μ . diam.; ascis irregularibus, sursum deorsumque tenuatis, breviter stipitatis, octosporis, 60-70 \approx 14-16; sporidiis distichis amygdaliformibus, oblongo-ovatis, subinæquilateralibus, utrinque rotundatis, granuloso-factis, rectis v. tenuiter curvulis, 16-18 \approx 7-8.

Hab. in foliis *Photiniæ* sp. in Horto botanico, Coimbra Lusitanæ (A. MOLLER).

11. *Guignardia diffusa* (Crié) Sacc. et Trott., *Læstadia diffusa* (Crié) 3540 Sacc. et Trav. — Syll. XIX, p. 1044 — *Depazea diffusa* Crié in Ann. Sc. nat. Bot. VII (1878) pag. 38, t. II, f. 4, 10, 11, t. VI, f. 10, tab. VIII, f. 15, 27. — Peritheciis amphigenis, prominulis,

atris; ascis lunge clavatis, breviter tenuato-stipitatis; sporidiis oblique monostichis, oblongo-ellipsoideis, continuis, hyalinis.

Hab. in foliis *Quercus* et *Castaneæ* in Gallia. — Teste auctore adsunt *Phyllostictæ* et *Septorictæ* species ut pycnidia habendæ; et quoque huc spectarent *Hendersonicæ*, *Pestalozziæ* et *Entomosporiæ* species, quod a priori excludendum.

12. **Guignardia microsticta** Sacc., sp. n. — Peritheciis hypophyllis 3541 dense gregariis, epidermide minutissime bullata et tunc punctato-dealbata tectis et vix denique erumpentibus, subglobosis, obsolete ostiolatis 150-200 μ . diam. nigricantibus, contextu parum distincte pseudoparenchymatico, atro-rubo; ascis fusoideis apice obtusulis, $70 \times 10-11$ in stipitem facile dilabentem sensim tenuatis, parte sporifera 50-55 μ . longa; sporidiis octonis, oblongis, utrinque obtusulis, curvulis, $16 \times 5,5$, hyalinis, intus minute granuloso-farctis, strato mucoso hyalino sat persistente obductis; paraphysibus nullis.

Hab. in pagina inferiore Cattleyæ sp., cultæ in calidariis, Versailles pr. Parisios Galliæ (P. HARIOT). — Ob bullulas punctiformes albo-flavidas epidermicas perithecia tegentes species mox dignoscitur et habitum peculiarem induit. A *Guign.* (Læstadia) *Traversi* Cav. differt præter hanc notam, ostiolo non prominulo, sporidiis distichis et muco cinctis.

13. **Guignardia ? melanostigma** (Lév.) Sacc. et Trott., *Sphaeria melanostigma* Lév., Voyage dans la Russie mérid. II, p. 105, t. V, f. 6 (1842). — Epiphylla, sparsa; peritheciis in areis decoloratis sub-centralibus, nigris, globulosis, nitidulis, prominulis, atro-farctis, ostiolo obsolete; ascis brevibus, apice valde dilatatis 4-5-sporis; sporidiis globulosis (?) diaphanis.

Hab. in foliis Graminaceæ cujusdam prope Sou-Dagh Rossiae merid. — Affinis dicitur *Sphaerella recutitæ*, sed peritheciis maculicolis et non seriatis et sporidiis diversa.

14. **Guignardia Musæ** Raciborski, Bull. Accad. Sc. Cracovie (1909) p. 388. 3543 — Peritheciis epiphyllis dense stipatis, in maculis irregulariter et non distincte limitatis, rubellis dein brunneis arescentibusque; peritheciis subcutaneis, ostiolo minutissimo non emergente præditis, vix prominulis, excipulo superne nigro, inferne incolore donatis, globosis 70-100 μ . diam.; ascis aparaphysatis, paucis, fasciculatis, clavato-ovoideis, crasse tunicatis, 50-56 \times 20, octosporis; sporidiis ovato-oblongis, hyalinis, levibus, utrinque rotundatis leviter inaequilateris, $18-19 \times 8-9$, intra ascum 1-cellularibus, extra (germinando?) inaequaliter bicellularibus.

Hab. in foliis vivis Musæ paradisiacæ, Buitenzorg insulæ Javæ.

15. **Guignardia Ulvæ** M. Reed, Univers. of California Publ. v. I 3544 (1902) p. 160, tab. V, fig. 1-6. — Peritheciis numerosis irregulariter sparsis, sphæroideis, obtusiusculis, 364-509 μ . cr., ostiolatis in thallo matricis immersis, utriusque prominulis, ex brunneo nigris; ascis late clavatis, in pedicellum basi attenuatis, 53-57 \times 9, octosporis; sporidiis oblongis v. ovatis, plasmate granuloso-farctis, hyalinis, 10-13 \times 3,5-7.

Hab. in thallo plus minusve deformato Ulvæ californicæ in litore S. Francisco Californie.

16. **Guignardia alaskana** M. Reed, Univers. of California Publ. v. I 3545 (1902) p. 161, tab. XV, fig. 7 et tab. XVI. — *Læstadia alaskana* (Reed) Sacc. et D. Sacc., Syll. XVII, p. 576. — Peritheciis brunneis v. nigris, numerosis, irregulariter distributis, sphæroideis, in thallo matricis immersis 273-450 μ . cr., ostiolatis; ascis clavatis basi in pedicellum attenuatis, 25-33 \times 7-14, octosporis; sporidiis anguste ellipsoideis, utrinque acuminatis, membrana tenui, hyalina, 8,5-13,5 \times 3-4.

Hab. in thallo plus minusve deformato Prasiolæ borealis in litore Alaskæ. — Rursus referimus diagnosin ex ipso Auctore; diagnosin enim in Syll. (l. c.) allatam, ex icone (tab. VII) satis dissona in Harriman, Alask. Exped. eruimus.

17. **Guignardia Coccocarpiae** (Pat.) Sacc. et Trott., *Læstadia Cocco-* 3546 *carpiæ* Patouill., Bull. Soc. Myc. Fr. XXIV (1908) p. 10. — Peritheciis erumpentibus dein superficialibus, sparsis, atris, nonnullis hyphis brunneis, septatis, 5 μ . cr., brevibus adfixis, globosis, levibus, apice papillatis, 300-400 μ . diam., contextu coriaceo, brunneo, celluloso, nucleus album inclusionsibus; paraphysibus filiformibus, hyalinis, rarissimis; ascis clavatis, 7-sporis, 75 \times 10-15; sporidiis hyalinis, simplicibus, ovoideis, saepe biguttulatis, uniseriatis, 10-12 \times 8-10, ope jodi nulla.

Hab. in thallo Coccocarpiae Gayanæ ex Chile (GAY).

18. **Guignardia Bambusæ** Miyake et Hara, Bot. Mag. Tokyo (1910) 3547 p. (238) [japonice].

Hab. in foliis Bambusæ sp. in Japonia.

19. **Guignardia juniperina** (Ellis) Rota-Rossi, Atti Ist. bot. R. Univ. 3548 Pavia ser. II, t. XIII. p. 206. — Ita vocanda *Læstadia juniperina* (Ellis) Sacc. Syll. IX p. 586.

20. **Guignardia Theæ** (Racib.) Bernard, Bull. Dept. Agric. Indes 3549

Neerland VI (1907) p. 26. — Ita vocanda est *Læstadia Theæ*
Racib. — Syll. XVI, p. 456.

21. **Guignardia Betulæ** (Auersw.) Sacc. et Trott., *Sphaerella Betulæ* 3550
Auersw. in Gonn. et Awd. Mycol. europ. Heft V e VI, t. III,
f. 36 (absque diagnosi).

Hab. in foliis Betulæ in Germania. — Ex icono: perithecia
hinc inde conferta, hypophylla; asci tereti-obclavati, octospori;
sporidia disticha v. oblique monosticha, obovato-oblonga, continua,
hyalina.

GLOMERELLA Schenk et Spauld. — Syll. fung. vol. XVII p. 573.

— Perithecia non vere rostrata sed sursum sensim tenuato-piriformia,
nec desunt species omnino erostres, hinc genus Sphaericeis
potius quam Ceratostomataceis adscriendum. A *Physalospora*
et *Guignardia* pseudostromate subpannoso videtur distinguendum.
Paraphyses probabiliter in pluribus speciebus, saltem initio, adsunt.

1. **Glomerella Gossypii** Edgerton, Mycologia, I (1909) p. 119, fig. 1 3551
et tab. VIII. — Peritheciis discretis v. aggregatis, copiosissimis,
innatis, ostiolo erumpentibus, rarius subsuperficialibus, brunneo-
nigricantibus, subglobosis v. piriformibus, 100-160 \times 80-120, ple-
rumque 140 \times 115; ostiolo nunc brevi, interdum tereti-conoideo 60
 μ . longo; ascis numerosis, clavatis, 55-70 \times 10-14; sporidiis uni-
seriatis v. irregulariter biseriatis, subellipsoideis, raro curvulis,
granulosis, 1-nucleatis, hyalinis, 12-20 \times 5-8, plerumque 13-14 \times 7;
paraphysibus tenuibus, copiosis, peritheciis cavitatem supra ascos
implentibus.

Hab. in caulibus *Gossypii* herbacei, Baton Rouge, La,
Amer. bor. Status conidiophorus est *Colletotrichum Gossypii*. —
Species *Gossypio* vere noxia.

2. **Glomerella fusarioides** Edgert., Botan. Gazette XLV (1908) p. 404 3552
Nota. — Peritheciis subliberis, subsparsis sed copiosis, brunneo-
nigricantibus, subglobosis v. piriformibus, interdum sensim subro-
stratis, 150-200 \times 140-175; ascis numerosis, clavatis, 50-75 \times 9-10;
sporidiis irregulariter biseriatis, rectis v. curvulis, 12-18 \times 3-4.

Hab. in caulibus *Asclepiadis syriacæ*, Ithaca New York.
— Status conidiophorus est, teste Edgerton, *Glaeosporium fusarioi-
des* E. et K., cuius vero diagnosis videtur inedita.

3. **Glomerella Artocarpi** Delacroix, Bull. trim. Soc. Myc. de France, 3553
vol. XXI, p. 198-200, tab. XII — Peritheciis, cuticula rupta, su-
perficialibus, epiphyllis, *Colletotricho* vel *Glaeosporio* contiguis,

structura subcellulosa, rotundatis v. subdepressis, collo minuto, ostioliformi, atque ad marginem foraminis hyphis, rectis, brevibus, septatis, pallide brunneis præditis, 130 \times 70-85; ascis apara-physatis 65-70 \times 10, sublavatis vel cylindraceis vel oblongis, rectis vel interdum subcurvulis, in asco oblique monostichis, 15 \times 4.

Hab. in foliis emortuis *Artocarpi* incisæ ex Africa. — Exemplaria visa forte immatura, ex auctore ipso.

4. **Glomerella fructigena** (Clint.) Sacc. Syll. XVII, p. 573 et XVIII, 3554 p. 450 — Var. *Vaccinii* Shear, Bull. Torr. Bot. Cl. XXXIV (1907) pag. 314. — Conidiis curvulis tereti-subclavatis, rubescensibus, 12-18 \times 4,5-6; setulis raris occurrentibus; peritheciis subiculo pan-noso atro-brunneo fultis, subglobosis, leviter rostratis; ascis 60-72 \times 10-12; sporidiis sub-distichis, e hyalino brunneolis, granulosis, ob-longo-ellipsoideis, 9-18 \times 5-7,5.

Hab. in foliis *Vaccinii macrocarpi*, New Jersey in America boreali.

APIOSPOROPSIS (Trav.) Giuditta Mariani in Atti Soc. ital. Sc. Nat. L (1911) p. 165 (Etym. ab *Apiospora* cuius est analogum genus) *Guignardia* subg. *Apiosporopsis* Trav. Fl. ital. crypt. Pyren. p. 391 (1905), *Sphaerognomonia* A. Potebnia in Ann. Mycol. (1910) p. 54. — Asci gnomoniacei seu tunica apice perforata prædicti, sed perithecia erostrata *Guignardiae*. Huc spectant: *Apiosporopsis carpinea* (Fr.) et *Ap. veneta* (Sacc. et Speg.). Quoad diagnoses cfr. Traverso l. c.

1. **Apiosporopsis Saccardiana** G. Mariani in Atti Soc. ital. Sc. Nat. 3555 L (1911) p. 165, fig. 1. — Peritheciis sparsis, hypophyllis, atris, globoso-depressis 200-300 μ . latis, foliorum parenchymate immer-sis, prominulis, epidermidem etiam in pagina superiore nigrefacientibus, ostiolo distincte conico, minuto præditis; ascis cylindra-ceis, breviter pedicellatis, apice bi-foveolatis, 80-100 \times 8-9, spurie paraphysatis; sporidiis typice monostichis, - ellipsoideo-oblongis, prope basim 1-septatis, 14-17 \times 3,5-4, hyalinis.

Hab. in foliis putrescentibus *Eriobotryæ japonicæ* prope S. Bento, circa Coimbra Lusitanicæ, novembri 1903. (A. MOLLER).

PHOMATOSPORA Sacc. — Syll. I p. 432, IX p. 589, XI p. 291, XIV p. 519, XVI p. 456.

1. **Phomatospora Fragariae** Krieger et Rehm, in Krieger Ann. Mycolog. IV (1906) p. 39. — Peritheciis in hypophyllo dealbato di-

spersis innatis semiglobosis dein conoideo-prominentibus breviter rostratis, atris, excipulo parenchymatico glabro, tenui, subfusco, 100 μ . diam., ascis cylindraceis sessilibus apice rotundatis c. 70 \times 9, 8-sporis; sporidiis ovoides, 1-cellularibus, hyalinis, strato mucoso obductis, 7-10 \times 4.5-5, 1-stichis; paraphysibus nullis.

Hab. ad folia anni præteriti *Fragariae* vescæ pr. Königstein Saxonie.

2. **Phomatospora Saccardoi** Rehm. Syll. f. II, p. 433, IX p. 590. — 3557

Var. *leptosphaeroides* Rehm., Contrib. Myc. Fl. Hung. Növénytani Közlem. (1905) p. 1. — Peritheciis in epidermide longe lateque fuscata nidulantibus, 0,3 mm. diam., rostro perithecii longe prominente; sporidiis 10 \times 5.

Hab. ad caulem *Aconiti* putridum, Nagytarpataki-Völgy (Tátra) Hungariae (Dr. LINHART).

3. **Phomatospora Trevoæ** Speg., Fungi Chilenses (1900) p. 32 cum 3558

icon. — Peritheciis laxe gregariis, lenticularibus pusillis, coriacellis epidermide tectis, 80-100 μ . diam.; ascis 6-18 in quoque perithecio, ovatis subsessilibus a paraphysatis, octosporis, 45-55 \times 15-20; sporidiis oblanceolatis hyalinis, 14-18 \times 5-6.

Hab. in ramis siccis emortuis *Trevoæ trinervis* San Bernardo prope Santjago, Chile Amer. austr.

4. **Phomatospora Kentiæ** Speg., An. Mus. Nac. Buenos Aires, t. XIX, 3559

(1909) p. 334. — Maculis effusis sordide pallescentibus; peritheciis pusillis sparsis v. obsolete seriatis, nigris, e globoso lenticularibus 120-150 μ . diam., primo epidermide velatis serius erumpentibus; ascis constipatis antice obtusiusculis postice in pedicellum breviusculum sensim attenuatis 75-90 \times 10-12, a paraphysatis v. paucissime pseudoparaphysatis, octosporis; sporidiis rectis v. oblique distichis cylindraceo-ellipsoideis 18-22 \times 5-6, utrinque obtusiusculis inaequilateralibus hyalinis v. nubilosus.

Hab. ad petiolos emortuos *Kentiæ Balmoreanæ*, Buenos Aires, Amer. austr. (E. AUTRAN).

5. **Phomatospora paulensis** Rehm, Ann. Mycol. V (1907) p. 524. — 3560

Peritheciis in maculis orbicularibus subochraceis, dilute cinereo-cinctis, epiphyllis, 3-8 mm. lat., innatis, arcte confertis in hypophyllo maculis minus conspicuis, dein emergentibus, semiglobosis, minutissime papillatis, poro conspicuo pertusis, nigris, subnitentibus in epiphylllo, 150-200 μ . diam., membranaceis fusco-contextis; ascis cylindraceis, 70-80 \times 12, 8-sporis; sporidiis oblongo-globosis, 1-cellularibus, guttulis oleosis repletis, strato gelatinoso

tenuissimo obductis, hyalinis, 10-12 \approx 7-8, 1-stichis; paraphysibus nullis.

Hab. in foliis coriaceis? São Paulo Brasiliæ (USTERI). — *Phys. varianti* videtur subaffinis.

PAIDANIA Raciborski. Bull. Ac. Sc. Cracovie (1909) p. 350 (Etym. a botanico collect. sundanico PA IDAN). Cfr. v. Höhn. Fragm. z. Mykol. VII, pag. 17. — Perithecia parasitica phyllogena, semie-rempentia, conica, basi applanata, ostiolo acuto dehiscentia excipulo inferius tenui, superne in membranam crassam dense cel-lulosam, brunneam 3-5-lobam, conspicue radiatam hyalino-fim-briatam abeunte. Asci cylindracei octospori, paraphysati. Sporidia monosticha, ovoidea, continua, hyalina. — Ob membranam coro-niformem, fimbriatam mox dignoscitur genus.

1. **Paidania Melastomacearum** Rac. l. c. v. Höhn. l. c. fig. 1. — Cha- 3561 racteres generis; perithecia brunnea, 220-310 μ . diam.; corona fimbriata 450-500 μ . lata, 100-120 μ . cr., asc. 90-96 \approx 17-20; spori-dia ovoideo-globulosa, intus minute granulosa, hyalina 13-15 \approx 7.

Hab. in pag. infer. foliorum Dissochætæ sp. Depok in M. Salak et Gedeh ins. Javæ.

PHYSALOSPORA Niessl — Syll. I p. 433, IX p. 591, XI p. 291, XIV p. 520, XVI p. 457, XVII p. 203.

1. **Physalospora Lardizabalæ** Speg., Fungi Chilenses (1910) pag. 34 3562 cum icon. — Maculis nullis; peritheciis hinc inde sparsis sæpius hypophyllis sublenticularibus minutis subcarbonaceis 100-120 μ . diam.; ascis cylindraceis non v. parcissime paraphysatis, 60-80 \approx 6-7, octosporis; sporidiis oblique monastichis ellipsoideo-subfusoi-deis, hyalinis, 10-12 \approx 3-4.

Hab. in foliis Lardizabalæ biternatæ in silvis Carro de Caracol Concepcion, Chile Amer. austr. — Sporidia quandoque occurunt subchlorina et subuniseptata.

2. **Physalospora Acænæ** P. Henn., Deutsche Südpolar- Exped. VIII 3563 (1906) p. 10 (extr.) tab. II, fig. 4. — Peritheciis innato-suberum-pentibus, sparsis, subglobosis, atro-membranaceis, ostiolatis, 80-90 μ . diam.; ascis subclavatis, apice obtuse rotundatis, octosporis, 35-45 \approx 4-6; paraphysibus filiformibus, flexuosis, hyalinis; spori-diis subdistichis, fusoideis, utrinque subacutis, continuis, hyalinis 7-9 \approx 3-3,5

Hab. in caulibus decorticatis Acænæ ascendentis in ins. Kerguelen Ocean. ind. (E. WERTH).

3. **Physalospora atro-inquinans** Rehm, Ann. Mycol. VI (1908) p. 317. 3564
Peritheciis in maculis epiphyllis foliorum vivorum orbicularibus, vix decoloratis ~1 cm., lat. sub epidermide denigrata innatis eamque elevantibus, globulosis, demum denudatis, atris poro vix perspicuo pertusis, membranaceis, 0,1 mm. diam.; ascis cylindraceis, apice rotundatis 60-70 ~ 10-12, 4-sporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, gregariis, guttulis oleosis repletis, hyalinis, 15 ~ 9; paraphysibus subramosis, septatis 2 µ. cr.

Hab. ad folia viva Papilionaceæ (? Phaeoleli). Sao Francisco Brasiliæ (ULE). — A *Ph. Astragali* peritheciis epidermide leviter nigrificata tectis distingueda videtur.

4. **Physalospora Ramosii** P. Henn., Hedwigii XLVII (1908) p. 257. 3565
— Maculis flavidulis v. obsoletis, sparsis; peritheciis epiphyllis gregariis, erumpentibus, pulvinatis, atris, opacis; ascis clavatis, obtusis, paraphysatis, 8-sporis, 40-50 ~ 8-12; sporidiis oblique monostichis v. subdistichis, subglobosis v. ovoideis, hyalinis, intus granulatis, hyalinis, 6-8 ~ 5-7.

Hab. in foliis Derridis sp. Luzon Prov. Rizal, Ins. Philipp. (RAMOS).

5. **Physalospora congensis** P. Henn., in Fl. du Bas- et Moy.-Congo, v. II fasc. III (1908) p. 226. — *Maculis rotundatis v. effusis, pallidis exarescentibus; peritheciis epiphyllis sparsis v. subconcentrica dispositis, punctiformibus subsphæroideis v. lenticularibus atris, 130-160 µ. diam.; ascis clavatis v. fusoides, vertice obtusis v. acutiusculis, 8-sporis, paraphysatis, 40-52 ~ 6-10; sporidiis oblique monostichis v. subdistichis, ellipsoideis, continuis, hyalinis, 4-5 ~ 3,5.*

Hab. in foliis Millettiae, Sonzo, Congo, (VANDERYST).

6. **Physalospora neglecta** Petch, Ann. R. Bot. Gard. Peradeniya IV Pt. IV (1909) p. 304. — *Peritheciis 0,3 mm. circ. cr., gregariis, in cortice immersis dein erumpentibus, leniter depresso, papilla parva abrupta, 0,08 mm. diam. et 0,08-0,12 mm. alta præditis, nigris æqualibus; ascis 140-160 ~ 35, clavatis, initio crasse tunicatis, octosporis; paraphysibus numerosis, septatis, asco brevioribus; sporidiis hyalinis, crasse tunicatis, inæquilateralibus, cymbiformibus, 32-40 ~ 12-16, distichis.*

Hab. in ramis vivis Theæ sp., in quibus corticem lacerat et callos cancriformes efformat, Kadugannava ins. Ceylon.

7. **Physalospora Bersamæ** Syd. Deutsche Zentral.-Afrika Exped. 3568

(1907-1908) II, p. 98. — Maculis amphigenis, irregularibus, indeterminatis, flavidis, 0,5-1,5 cm. latis; peritheciis in maculis numerosis, epiphyllis, gregariis, discretis, globulosis, 180-240 μ . diam., epidermide elevata tectis et ostiolo papilliformi, atro tantum prominulis; ascis clavatis, 70-80 \times 20-22, octosporis, paraphysatis; sporidiis distichis, ellipsoideis, utrinque rotundatis et grasse 1-guttulatis, continuis, hyalinis, 14-18 \times 10-12.

Hab. in foliis Bersamæ *ninagongensis*, prope Kissemje Africæ trop.

8. **Physalospora Oreodaphnes** Theiss., Beih. Botan. Centralbl. Bd. 3569

XXVII (1910) Abt. II, p. 400. — Maculis in epiphylllo brunneonigrescentibus, in hypophyllo fusco-brunneis, 3-10 mm. latis; peritheciis epiphyllis in maculis densiuscule gregariis, innatis, atris, nitentibus, semigloboso-conoideis, 180-240 μ . diam., poro minutissimo pertuso; ascis cylindraceis, p. sp. 58-72 \times 10-12, deorsum in pedicellum usque ad 30 μ . long. attenuatis; paraphysibus filiformibus; sporidiis monostichis, hyalinis, continuis, utrinque rotundatis, ellipsoideis, 12-14 \times 8-9 v. subglobosis 7-9 μ . diam.

Hab. in foliis emortuis *Oreodaphnes vaccinoides*, Sao Leopoldo Rio Grande do Sul Brasilieæ. — A *Ph. manaoensis* Henn. differt maculis, ascis, sporis majoribus etc.

9. **Physalospora Coffæ** Speg., An. Mus. Nac. Buenos Aires t. XIX 3570

(1909) p. 334. — Peritheciis lenticularibus 90-100 μ . diam., obsolete ostiolatis glabris, membranaceo-coriaceis, contextu indistincte atro opaco donatis, sparsis v. saepius densiuscule gregariis, macula effusa pallescente v. sordidula insidentibus; ascis cylindraceis ante obtusis rotundatis, postice breviter attenuato-pedicellatis, 60-80 \times 5-8, octosporis, paraphysibus piliformibus longioribus densiusculis obvallatis; sporidiis saepius distichis ex ellipsoideo cylindraceis subnavicularibus 8-12 \times 8-4, utrinque obtusiusculis non vel minute biguttulatis, hyalinis.

Hab. ad ramulos decorticatos putrescentes *Coffea arabica* Oran prov. Salta Rep. Argentina Amer. austr.

10. **Physalospora Morindæ** Koord., Botan. Untersuch. (1907) p. 190, 3571

fig. 18, II. — Maculis orbicularibus v. oblongis arescendo flavescentibus, 10-15 mm. diam.; peritheciis amphigenis, gregariis, globoso-depressis, ostiolo punctiformi, atris, glabris, 100-110 μ . diam., tectis; ascis paraphysatis, clavatis, fasciculatis, 45-50 \times 10-12, crasse tunicatis, 8-sporis; sporidiis oblongis, continuis, hyalinis,

rectis v. subrectis, utrinque obtusis v. rotundatis, intus granulosis, 11-13 \approx 4-5; paraphysibus paucis indistinctis.

Hab. in foliis vivis *Morindæ citrifoliae* prope Purwore-djo prov. Ledu ins. Java (KOORDERS).

11. *Physalospora Clerodendri* Syd., in De Wildem., Flore Bas- et 3572 Moy. Congo t. III, fasc. I (1909) Extr., p. 14. — Peritheciis epi-phyllo, sine maculis, sed plerumque per totum folium v. magnam ejus partem aequaliter distributis, innato-erumpentibus, subglobosis, 120-180 μ . diam., pertusis, atris; ascis clavatis, apice obtusis, longissime stipitatis, p. sp. 45-60 \approx 18-25, stipite usque ad 50 μ . longo, octosporis; sporidiis distichis v. irregulariter positis, oblongo-ellipsoideis, continuis, hyalinis, tandem hyalino-fuscidulis, 12-18 \approx 6-7.

Hab. in foliis *Clerodendri* sp., Kisantu, Congo (VANDERYST).

12. *Physalospora Amphibolii* Rehm, Ann. Mycol. VII (1909) p. 536. 3573 — Peritheciis in epiphylo foliorum hand maculatorum juxta nervum primarium seriatim innatis, globulosis, papillula minutissima prominente, nigra, glabra, 0,12 mm. diam., parenchymatice contextis; ascis cylindraceis, 70-80 \approx 12-14, octosporis, J.-; sporidiis oblongo-clavatis, unicellularibus, guttulatis, hyalinis, 20-22 \approx 6-7, distichis; paraphysibus filiformibus.

Hab. in foliis *Amphilobii* Vauttieri, Sao Leopoldo Rio Grande do Sul Brasilie (S. J. THEISSEN).

13. *Physalospora Kellermanii* Rehm, in Kellermann, Journ. of My- 3574 col. XIV (1908) pag. 5. — Peritheciis in utraque pagina foliorum languescentium, subinde fuscidolorum gregarie innatis, hemisphærice prominentibus, lenticularibus, glabris, atris, minutissime papillatis, demum foveolam nigram in folii parenchymate reliquenibus, parenchymatice fuscidule contextis, 0,2 mm. diam.; ascis cylindraceis, teneris, 60 \approx 8, 8-sporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, hyalinis, guttulis minimis repletis, 12 \approx 6, monostichis; paraphysibus filiformibus.

Hab. in foliis *Shillingiae acutifoliae*, Livingston Guatema-la (KELLERMAN).

14. *Physalospora Hoyæ* v. Höhnel, Frigm. z. Mykol., Sitzb. K. Ak. 3575 d. Wiss. Wien, Bd. CXIV Abt. I (1907) p. 122. — Peritheciis nigris, punctiformibus, sparsis v. lineatim subseriatis, amphiogenis, areolis 3-4 mm. latis insidentibus, globosis, ostiolo obtuso erumpentibus, 120-180 μ . diam., contextu tenero, pallide brunneo; ascis clavatis, sessilibus, apice obtusis, teneris, octosporis, 60-90 \approx 12-15, paraphysibus crassiusculis 3 μ . cr., multi-guttulatis, facile

diffluentibus obvallatis; sporidiis distichis, hyalinis, continuis, intus granulosis, elliptico-clavulatis, utrinque obtusulis v. acutulis, 16-23 \times 6,5-8.

Hab. in foliis emortuis Hoyæ sp. in insulis Samoa Polynesiae (Dr. RECHINGER). — Dispositio peritheciorum interdum subdenudrita. *Phys. affini* proxima.

15. **Physalospora Fagrææ** v. Höhnel, Fragm. z. Mykol., Sitzb. R. Ak. d. Wiss. Wien Bd. CXVI Abt. I (1907) p. 123. — Peritheciis nigris, globosis, leviter prominulis, subinde annulo albido cinctis, membranaceo-firmis, 150-200 μ . diam., ostiolo subrotundo-depresso 32 μ . diam. præditis, hypophyllis late gregariis, maculam nullam lignentibus; ascis copiosis, clavatis breviter noduloso-stipitatis, sursum subtenuatis, octosporis, 50-80 \times 10-13, paraphysibus filiformibus, diffluentibus; sporidiis subdistichis, oblongo-fusoideis, rectis, obtusulis, 18-23 \times 5-5,5, hyalinis, farctis v. granulosis.

Hab. in foliis Fagrææ sp. ex Loganiaceis pr. Utumapa ins. Samoa Polynesiae (RECHINGER).

16. **Physalospora placida** Syd., Ann. Mycol. VII (1909) p. 544. — 3577 Maculis amphigenis, orbicularibus, in epiphylo griseis, in hypophyllo brunneolis, linea elevata fusco-purpurea cinctis, 3-10 mm. diam.; peritheciis epiphyllis, epidermide diu tectis, lenticulari-globosis, apice papillula minuta atra nitida præditis, atris, 125-200 μ . diam.; ascis cylindraceis v. cylindraceo-fusiformibus, apice mox rotundatis, mox leniter attenuatis, basi breviter stipitatis, 62-88 \times 11-15, octosporis; sporidiis distichis, subcylindraceis, apice rotundatis, basi plerumque attenuatis, rectis, continuis, hyalinis v. hyalino-chlorinatis, 21-28 \times 4, plasmate sepe bipartito; paraphysibus numerosis, filiformibus ascis superantibus.

Hab. in foliis vivis Minusopis, Africa or. lusitanica (C. W. HOWARD).

17. **Physalospora melastomicola** Speg., Fungi Paulist., Rev. Mus. La Plata t. XV (1908) p. 18. — Maculis amphigenis, primo pallescentibus, dein cinereo-arescentibus, limitatis, 2-4 mm. diam., areola fuscescens-rubescens plus minusve lata cinctis; peritheciis superius epiphyllis, laxe gregariis minutis, 80-100 μ . cr., glabris, coriacellis atris, contextu parenchymatico parum distincto fuligineo; ascis subcylindraceis apice obtuse rotundatis v. subtruncatis, deorsum leniter cuneato-attenuatis, brevissime crasseque pedicellatis 60 \times 8-9, octosporis, paraphysibus paucis filiformibus obvallatis; sporidiis linearibus leviter inaequilateralibus, utrinque subacutius-

cule rotundatis 16-25 \vee 3-4 hyalinis, continuis, rarius diblastis vel quadriguttulatis.

Hab. in foliis languidis Melastomaceæ cuiusdam, Ipiranga, Cambucy Brasiliæ (USTEARI).

18. **Physalospora Diapensiæ** Rehm, Ann. Mycol. VI (1908) p. 323. 3579
 — Peritheciis in pagina superiore dealbata foliorum gregariis, innato-erumpentibus, dein fere sessilibus, globulosis haud papillulatis, atris, glabris, membranaceis 100-120 μ . diam.; asci clavatis, ad basim latioribus, sessilibus, 8-sporis, 50 \vee 10; sporidiis clavulatis, 1-cellularibus, utrinque rotundatis, hyalinis, 18-20 \vee 5-6, distichis; paraphysibus?

Hab. in foliis Diapensiæ lapponicæ, in Lapponia (HELLBOM).

19. **Physalospora Crepiniana** Sacc. et March. Revue Myc. (1885) 3580 p. 145 — Teste Rehm, Ann. Mycol. VI (1908) p. 320 huc spectant:
Physalospora alpina Speg. var. *Crepiniana* Sacc. Syll. IX, p. 594 et *Physalospora Empetri* Rostrup, Sacc. Syll. XVII, p. 583 — tamen species variat ascis nunc 100-110 \vee 10-15, nunc 60-70 \vee 15 et sporidiis modo 20-26 \vee 10-11 et modo 15-18 \vee 7-9.

20. **Physalospora Rhododendri** Naumann, Jahresb. d. Ver. f. angew. Bot. 1909, Berlin (1910) p. 161. — Peritheciis erumpentibus, epi-phyllis, 140 μ . lat., 120 μ . alt.; ascis subteretibus 80 μ . longis, octosporis; sporidiis obovatis (lacrimi-formibus) continuis, 20 \vee 8, hyalinis.

Hab. in foliis Rhododendri specierum cultarum in Germania. Folia infecta arescant et exsiccantur, gemmæ moriuntur et tunc totus ramus perit.

21. **Physalospora leptidea** (Hazsl.) Sacc. et Trott., *Læstadia leptidea* 3582 Hazsl. Sphaer. Hung. pag. 115, t. VI, f. 27, vix *Sphaeria leptidea* Fr. Cfr. Syll. I, p. 535 et III p. 111. — Peritheciis globosis, erumpenti-superficialibus, nigris papillulatis, hypophyllis; ascis clavatis, apice obtuse rotundatis, deorsum breviter tenuato-stipitatis, octosporis, 16 μ . cr., paraphysibus copiosis filiformibus, ascum paullo superantibus obvallatis; sporidiis distichis v. subdistichis ellipsoideo-oblongis, obtusolis, 14-16 \vee 4, continuis, hyalinis.

Hab. in foliis Vaccinii Vitis-idææ in Hungaria. — Paraphyses copiosissimæ, hinc non *Læstadia* (= *Guignardia*).

22. **Physalospora Vitis-idææ** Rehm, in Krieger Ann. Mycol. IV (1906) 3583 p. 40. — Peritheciis in hypophyllo minutato gregariis verrucoso-minutis, globosis, papillula conoidea solum prominente, glabris,

nigris, 150 μ . diam, excipulo tenui fusco parenchymatico-contecto, ad ostiolum subfimbriato; ascis, fusiformibus, teneris, 90-120 \times 20, octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, hyalinis, 18-20 \times 9-10, strato mucoso tenui obductis, distichis; paraphysibus filiformibus, septatis, 3 μ . cr., non gelatinosis.

Hab. ad folia Vaccinii Vitis-id æ prope Königstein Germaniae. — *Physalospora alpinae* Speg. affinis.

23. **Physalospora Rhododendri** (De Not.) Rehm, Ann. Mycol. V (1907) 3584 p. 536. — Ita vocandæ, teste Rehm, *Sphaerella Rhododendri* De Not. Sf. ital. p. 86, t. 96, seu *Læstadia Rhododendri* Sacc. Syll. f. I, p. 428 et *Physalospora alpina* Speg., Sacc. Syll. I, p. 436. — Sporidia variant 35-48 \times 8-12; paraphyses ramosæ. — Nascitur species frequens quoque in Alpibus Tiroliae ad folia *Rhododendri ferruginei* (REHM).

24. **Physalospora populina** Maubl., Bull. Soc. Myc. Fr. XXIII (1907) 3585 p. 141. — Peritheciis innatis, sparsis, peridermio pustulato elevato tectis, intus pallide roseis, depressis, poro minuto, non prominulo pertusis, 250 \times 175; ascis clavato-cylindraceis, sessilibus, apice tenuatis, 69-75 \times 11-15, octosporis; paraphysibus initio numerosis, granulatis, septatis, 2,5-3 μ . cr., demum diffluentibus; sporidiis distichis, inferne monostichis, ellipsoideis v. oblongis, interdum inæquilateris, utrinque obtusis, primo grosse biguttatis, demum nubiloso-guttulatis 14-20 \times 5-7; pycnidiis (*Phoma Maublanci* Sacc. et Tr.) globosis v. depressis, immersis, dein peridermio rupto semi-erumpentibus, poro pertusis, 225 μ . diam.; sporulis hyalinis ovoides, 2-guttatis, 5-7 \times 2,5-3; sporophoris brevibus, vix conspicuis.

Hab. in ramulis emortuis Populi carolinianæ pr. Toulouse Galliae.

25. **Physalospora Salicis** (Fuck.) Sacc. Syll. I, p. 439 — var. *gregariella* Sacc. Ann. Mycol. VII (1909) p. 435. — Peritheciis late densiuscule gregariis; ascis tereti-fusoideis, 50 \times 8; sporidiis oblongo-ellipsoideis, 14 \times 4-5.

Hab. in ramis morientibus Salicis vitellinæ, Eichwalde pr. Berolinum (H. Sydow).

26. **Physalospora Elasticæ** Koord., Botan. Untersuch., (1907) p. 191 3587 fig. 18, I. — Peritheciis epiphyllis, sparsis v. gregariis, tectis ostiolo papillato erumpente, coriaceis, atris, glabris, discretis, 60-90 μ . diam.; ascis tereti-clavatis, paraphysatis, 40-55 \times 15-16, octosporis, fasciculatis, paraphysibus filiformibus, numerosissimis, hyalinis, 80 μ . longis, indivisis, continuis; sporidiis continuis, hyali-

nis, oblongis, utrinque rotundatis, rectis v. subrectis (haud allantoideis) 13-18 \times 5-6.

Hab. in macula foliorum Fici elasticæ in insula Java (KOORDERS).

27. **Physalospora gregaria** Sacc. Syll. I, p. 435 — f. **Taxi** Feltg. 3588 Vorst. Pilz-Fl. Luxemb. IV (1905), p. 56. — A typo recedit peritheciis subsparsis nec gregariis, non emergentibus, sporidiis paullo brevioribus et crassioribus, 15-22 \times 7-10, subovoideis.

Hab. in apice ramulorum Taxi baccatæ in Luxemburgia. Perithecia 150-200 μ . diam.; ascii 70-110 \times 15-20.

28. **Physalospora Phaseoli** P. Henn., Syll. XVII, p. 580 — var. **guatemalensis** Rehm in Kellerman Journ. of Mycol. XIV (1908) p. 4. — Maculis orbicularibus luteolis, 1-3 cm. latis, demum confluentibus; peritheciis dispersis, globulosis, nigris, demum hemisphaerice prominentibus, 0,15-0,2 mm.; ascis 70-80 \times 12; sporidiis oblongo-orbicularibus 9 \times 8; monostichis; paraphysibus filiformibus 1,5 μ . cr.

Hab. in foliis plantæ ignotæ prope Guatemala Amer. centr. (KELLERMAN).

29. **Physalospora obtgens** Rehm, Ann. Mycol. V (1907) p. 524. — 3590 Peritheciis gregariis totum stipitem obtgentibus, innatis sub epidermide haud mutata, globulosis papillula minutissima prominentibus, atris, basi hyphis crebris ramosis septatis 3-5 μ . cr. fuscis obsessis, 120 μ . diam., membranaceo-contextis; ascis oblongis, apice rotundatis, 60-65 \times 18, octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus interdum guttam 1 oleosam magnari in cludentibus, hyalinis, 18 \times 8-9, distichis; paraphysibus ramosis, teneris.

Hab. in arbore ignota vulgo « Achete », Sao Leopoldo, Rio Grande do Sul, Brasiliæ (RICK). — Habitus *Sphaerellæ*.

30. **Physalospora sanguinea** Rehm, Ann. Mycol. V (1907) p. 524. — 3591 Maculis amphigenis, orbicularibus, demum oblongis, in epiphyollo primitus sanguineis, distincte nigrosanguineo-marginatis, demum expallescentibus, planis, in hypophyllo item marginatis et bulboso-prominentibus, ochraceis, 0,5-1,5 cm. diam.; peritheciis in hypophyllo gregariis innatis globulosis nigris apice vix prominentibus, poro haud conspicuo, parenchymatico-fusco-contextis, 180 μ . diam.; ascis fusiformibus, apice rotundatis, sessilibus, teneris, 60-65 \times 8-9 8-sporis; sporidis oblongis, rectis, utrinque rotundatis, 1-cellula-

ribus, hyalinis, 10-12 \times 3,5 distichis; paraphysibus teneris, filiformibus, septatis.

Hab. in folio coriaceo in horto botan. Sao Paulo, Brasiliæ (USTERT). — *Affinis videtur Phys. jurutance.*

31. **Physalospora Lapageriæ** Speg., Fungi Chilenses (1910) p. 33 cum 3592 icon. — Maculis nullis v. obsoletis; peritheciis laxe gregariis amphigenis innato-superficialibus minutis atris glabris submembranaceis, 100-125 μ . diam.; ascis subellipsoideis brevissime pedicellatis, 50-60 \times 16, pseudoparaphysibus percrassis longioribus obvalbatis, 70-80 \times 10-12; sporidiis distichis, ellipsoideis hyalinis 16 \times 8

Hab. in foliis siccis Lapageriæ roseæ in silvis Cerro Caracol Concepcion Chile Amer. austr.

32. **Physalospora Orchidearum** P. Henn., Hedw. XLIV (1905) p. 170. 3593

— Peritheciis innatis, vertice atro-nitenti erumpentibus, membranaceis, c. 140-180 μ . diam.; ascis clavatis vel subfusoideis, apice rotundatis, 8-sporis, 50-70 \times 8-12; paraphysibus filiformibus, hyalinis; sporidiis subdistichis cylindraceis, utrinque obtusis, rectis vel curvulis, 2-guttulatis, continuis, hyalinis, 15-18 \times 4-5.

Hab. in caulinis emortuis Tainiæ stellatae et Lælia Schilleriana in horto bot. Berolinensi.

33. **Physalospora amphidyma** H. et P. Syd., Ann. Mycol. III (1905) 3594

p. 184. — Maculis amphigenis, suborbicularibus, 3-5 mm. diam., albidis, bene linea rufo-purpurea elevata cinctis; peritheciis in utraque folii parte conspicuis, sparsis, minutis, punctiformibus, diutius tectis, vertice demum tantum erumpentibus, sed vix vel haud prominulis, globosis, atris, glabris, 100-140 μ . diam.; ascis clavato-cylindraceis, apice attenuatis, subsessilibus, 45-55 \times 9-11, octosporis; sporidiis oblique distichis, oblongo-ellipsoideis, utrinque leniter attenuatis, continuis, hyalinis, 13-18 \times 3 $\frac{1}{2}$; paraphysibus filiformibus, ascis aequantibus.

Hab. in foliis vivis Dracænæ Papahu, pr. Amani Africa orient. (A. KARASEK).

34. **Physalospora Dracænæ** Sheldon, Journ. of Mycol. XIII (1907) 3595

p. 140. — Stat. conid. *Glaeosporii* sp. — Acerulis plerumque epiphyllis, fuscis, conidiis in massulas rubentes erumpentibus; peritheciis sphaericis v. subphialiformibus et rostellatis, nigris; ascis filiformi-paraphysatis, clavatis; sporidiis conidiis similibus sed leviter curvis.

Hab. in foliis, quæ exsiccantur, Dracænæ fragrantis in

- calidariis Virginiae Amer. bor. — Diagnosis imperfecta. Ob perithecia subrostrata potius *Glomerellæ* species.
35. **Physalospora antarctica** P. Henn., Deutsche Südpolar-Exped. 3596 VIII (1906) p. 10, t. II, f. 5 (extr.). — Peritheciis sparsis, in natis, ostiolo erumpentibus, ovoideis, fuscis, membranaceis, 65-80 μ . diam.; ascis clavatis, apice rotundatis, octosporis; 25-30 \times 5-7; paraphysibus filiformibus, obtusis, hyalinis, 1,5 μ . cr.; sporidiis subdistichis, fusoideis, utrinque acutiusculis, interdum 3-guttulatis, hyalinis, 10-15 \times 2,5-3,5.
- Hab.* in foliis Junci scheuchzerioidis in insula Possession et Kerguelen pr. polum australem (E. VANHOEFEEN et E. WERTH).
36. **Physalospora Moliniæ** Kirschst., Verh. Bot. Ver. Brandenb. 3597 XLVIII (1906) p. 55. — Peritheciis dense gregariis, minutis, globosis, nigris, breve rostellatis, immersis, dein paulo emergentibus; ascis clavatis, breve stipitatis, 40-50 \times 5-6, octosporis; sporidiis oblique monostichis, v. distichis, fusoideis, acutatis, leniter inaequaliteris, continuis, 8-12 \times 4-5, hyalinis; paraphysibus filiformibus!
- Hab.* prope basim culmi emortui sed adhuc stantis Moliniæ cæruleæ, Rathenower Stadtforst, Brandenburg.
37. **Physalospora amianticola** Vouaux ap. Lesdain, Bull. Soc. bot. Fr. LVI (1909) p. 3. — Peritheciis vel tectis, vel emergentibus v. fere superficialibus, sparsis, membranaceo-carbonaceis, poro minimo simplici præditis 200 μ . diam., contextu pseudoparenchymatico, cellulis 3-4 μ . diam. fuscis; ascis, cylindraceis 4-8-sporis, 120 \times 12; sporidiis ellipsoideis, hyalinis, continuis, 20-22 \times 8-9, biseriatis, saepe irregulariter multiguttulatis; paraphysibus agglutinatis.
- Hab.* in amianto contexto aëri diu exposito pr. Versailles Galliæ.
38. **Physalospora Citharexyli** Rehm in Hedw. XL (1901) pag. 112, 3599 t. VI, f. 42 et in Rab.-Pazschke, F. Eur. n. 4161 (nomen nudum). — *Hab.* ad folia viva Citharexyli sp. in Brasilia (ULE). — Ex iconе sporidia ellipsoidea, utrinque subtenuato-rotundata, 15-17 \times 5-6, hyalino-farcta, non guttata.
- UROSPORELLA** Atkins. — Syll. XIV p. 523.
1. **Urosporella argentinensis** Speg., An. Mus. Nac. Buenos Aires. 3600 t. XIX (1909) p. 335, cum icon. — Matrice omnino denudata obsoleta vaseve infuscata; peritheciis superficialibus vix basi inscul-

ptis (an primo epidermide velatis?) sparsis v. subseriatis, modice papillato-ostiolatis 150 μ . diam., membranaceo-coriacellis, contextu indistincto atro; ascis utrinque subattenuatis antice truncatis postice breviuscule crassiusculeque pedicellatis 115-125 \times 8-9, octosporis, paraphysibus filiformibus vix longioribus parcis obvallatis, sporidiis oblique monostichis non v. leviter inaequilateralibus 14-16 \times 7, hyalinis, semper grosse 1-v. 2-guttulatis (an initio tunica mucosa tenui vestitis?), utrinque 1-ciliatis, ciliis rectis 6-10 μ . long. rigidulis concoloribus.

Hab. ad caules aridos Echii plantaginei prope La Plata, Argentina Amer. austr. — An ab *U. americana* Atk. satis distincta?

TRABUTIA Sacc. et Roum. — Syll. I p. 449, IX p. 601, XI p. 293, XVI p. 463; XVII p. 587.

1. **Trabutia Erythrinæ** Rick in Ann. Mycol. III (1905) p. 239. — 3601
Stromate atro, clypeato, 1-2 mm. lato, saepius confluente, orbiculari, depresso, ostiolo exerto, ramos ambiente; ascis elliptico-clavatis, breviter et anguste pedicellatis, octosporis, 50-60 \times 25; sporidiis hyalinis vel olivaceis, ellipticis vel rectangularibus, granulis repletis, 20-25 \times 12-15; paraphysibus hyalinis.

Hab. in ramis Erythrinæ Cristæ-Galli in Brasilia. — Est *Trabutia* habitu dothideaceo.

2. **Trabutia Molleriana** Da Camara, Bol. Soc. Broteriana, XXV (1910) 3602
Extr. p. 6. — Peritheciis suborbiculatis v. globoso-depressis, subcarbonaceis, nigris in stromate erumpenti linearique immersis, modo gregariis, modo solitariis, (habitu fere sclerotioideo), ostiolo rotundo, minuto; ascis plus minus claviformibus, interdum cylindraceis, medio inflatis, non v. vix stipitatis, octosporis, 50-60 \times 8-10; sporidiis distichis, ellipsoideis, continuis, hyalinis, grosse biguttulatis, utrinque rotundatis, 10-12 \times 5-6.

Hab. in foliis Iridis sp. in horto botanico Coimbra Lusitanæ (A. MOLLER).

WALLROTHIELLA Sacc. — Syll. I p. 455, IX p. 605, XI p. 294, XIV p. 524, XVI p. 465, XVII p. 587.

1. **Wallrothiella meraria** Karst., Acta Soc. Fauna et Fl. fenn. XXVII, 3603
4 (1905) p. 7. — Peritheciis confertissimis matrici laxe adhaerentibus, spheroideis, atris, opacis, astomis, forte demum pertusis, parvis; ascis tereti-clavatis; sporidiis distichis v. submonostichis,

ellipsoideis, hyalinis, eguttatis, 17-20 \times 8-10; paraphysibus haud discretis, flavescentibus, asci longitudine.

Hab. supra merdam humanam in sacellania Willnäs Fen-niæ.

TRICHOSPHÆRIA Fuck. — Syll. I p. 452, IX p. 602, XI p. 293, XIV p. 523, XVI p. 463, XVII p. 588.

1. **Trichosphæria paraënsis** Syd., Hedwigia XLIX (1909) p. 79. — 3604
Peritheciis sparsis, in mycelio atro effuso superficialibus, ovato-globosis, atris, coriaceo-carbonaceis, tandem collabescientibus, 200-300 μ . diam., setis rigidis atris apicem versus acutis, 70-125 μ . longis, 6-10 μ . crassis; mycelio repente, effuso, ex hyphis ramosis septatis fuscis 6-10 μ . crassis, conidia obclavata multiseptata fusca in flagellum perlongum dilutius producta tota usque ad 175 μ . longa et basi usque ad 18 μ . crassa gerentibus composito; ascis cylindraceo-clavatis, obtusis, p. sp. 45-62 \times 16-21, stipite usque ad 40 μ . longo et c. 7 μ . crasso suffultis, octosporis; sporidiis irregulariter distichis late ellipsoideis, utrinque rotundatis, continuis, hyalinis, intus nubilosis, 15-20 \times 7-10.

Hab. in ramis emortuis Stenocalycis brasiliensis, Para Brasiliæ (C. F. BAKER).

2. **Trichosphæria vagans** Boud. Ic. myc. III (1910) t. 574 (Ser. I, p. 2). — 3605
Atra, glabra, sed in subiculo mycelioso longe lateque expanso numerosim congesta; peritheciis turbinatis, vertice papillatis et circa otiolum sæpo depressis; ascis numerosis, clavatis ad basim attenuatis, octosporis 70-80 \times 10-12; sporidiis oblongo-fusoides, hyalinis, sæpius intus 4-guttulatis, 15-19 \times 4-5.

Hab. ad basim trunci Cratægi Oxyacanthæ, ad terram, Montmorency Galliæ.

3. **Trichosphæria inter pilosa** Fairm., Proc. Rochest. Ac. of Sc. IV (1906) p. 219. — 3606
Peritheciis sparsis, minutis, ovoideo-globosis, parce pilosis; pilis atro-brunneis, sursum dilutioribus; ostiolo minute papillato; ascis tereti-clavatis, 77-93 \times 10, octosporis; sporidiis oblique monostichis ex ovoideo oblongis, continuis, granulosis, 13-14 \times 6-7, interdum (ob pressionem) subsigmoideis, hyalinis.

Hab. in lignis putridis, Lyndonville N. Y. Amer. bor. — Perithecia subiculo obsoleto et inter pilos erectos brunneos inserta.

4. **Trichosphæria javensis** v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII (1909) pag. 335. — 3607
Peritheciis superficialibus, sparsis, opace nigris, ovoideis breve conoideis, 300 μ . diam., infra glabis,

supra setulosis; setulis 10-15, brunneolis, 5-10-septatis, rigidulis, apice acutis obtusisve, pallidioribus 120-240 \times 10-14 (basi); contextu atro-brunneo, cellulæ polyedricis 7-8 μ . diam.; ascis apaphisatis, teneris, clavatis, apice truncato-conoideis, deorsum in stipe 30 μ . long. productis, octosporis, 80-100 \times 16; sporidiis subdistichis ellipsoideis, continuis, 12-14 \times 7-8, diu hyalinis, demum dilute brunneolis, grosse 1-guttatis.

Hab. in corticibus vivis arborum pr. Tjibodas ins. Javæ.

5. **Trichosphæria cupressina** Rehm, Ann. Mycol. III (1905) p. 520 3608 et V (1907) p. 517. — Peritheciis dispersis sessilibus, globulosis 270 μ . diam., parenchymatico-contextis fuscō-membranaceis, ubique setis rectis, glabris, acutatis, subfuscis, dispersis 120 \times 4-6 (ad basim) obsessis, nigris, basi hyphis nonnullis longis fuscis cinctis; ascis clavatis, apice rotundatis, 70-80 \times 15-18, 8-sporis; sporidiis fusiformibus vel subclavatis, altero apice rotundatis, interdum subcurvatis, 1-cellularibus, guttas oleosas 1-2 magnas includentibus, hyalinis, 18-24 \times 6-7, distichis; paraphysibus filiformibus, septatis.

Hab. ad folia Cupressi thoidis, Newfield, N. Jersey Am. bor. (ELLIS). — *Trich. regulinæ* affinis.

6. **Trichosphæria bambusina** v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) p. 336. — Peritheciis superficialibus, subiculo albo tenuissimo insertis, in greges minutos crebros dispositis, nigris, membranaceo-carbonaceis, globosis, 80-90 μ . diam., circulariter setosis, setulis rariusculis, continuis, acutis conico-tenuatis, rigidis, atro-brunneis, 20-32 \times 3-5, vertice areolam nudam ostiolo minuto pertusam relinquenteribus; ascis apaphysatis, sessilibus, fusoideo-clavatis, octosporis, teneris, 24-28 \times 4-5,5; sporidiis distichis, oblongo-teretiusculis, rectis, v. curvulis, utrinque obtusulis, hyalinis, 4-guttulatis (simulate 4-cellularibus), 6-7 \times 1,5-2.

Hab. in culmis emortuis Bambusæ, Tjibodas ins. Javæ. — Subiculi hyphæ 1-2 μ . cr.

MIYOSHIA Kawamura, Journ. of Coll. of Sc. Imp. Univ. Tokyo v. XXIII (1907) fasc. II, tab. 1-5. (Etym. a professore japonico M. Miyoshi). — Peritheci subiculo nigro inserta, atra, subcarbonacea, brunneo-pilosa, globosa-conoidea, papillato-ostiolata. Ascii elongati, paraphysati, octospori. Sporidia fusoidea, continua, hyalina, levia. — Adsunt conidia clavato-cylindracea, pluriseptata *Clasterosporii* ad instar.

1. **Miyoshia fusispora** Kawamura l. c. Charact. gen. — Subiculi hy-

3610

phis septatis, brunneis, laxis, subsimplicibus; peritheciis piriformibus, 500-600 \approx 250-350; ascis cylindraceis deorsum breviter tenuato-stipitatis, paraphysisibus filiformibus, parce septatis obvallatis, octosporis; sporidiis oblique monostichis, fusoideis rectis vel vix curvulis, utrinque acutulis, hyalinis, 28-33 \approx 6-8, 1-guttulatis granulosisque; conidiis variis 50-120 \approx 5-15, brunneis, dense et crasse multiseptatis.

Hab. in foliis Arundinariæ Narihiraæ, quæ tigrino-maculantur, in Japonia.

BOTRYOSPHÆRIA Ces. et De Not. — Syll. I p. 456, IX p. 605.

XI p. 295, XIV p. 524, XVI p. 467, XVII p. 590.

1. **Botryosphæria Berengeriana** De Not. — Syll. I, p. 457 — var. 3611 *acerina* Rehm, Ann. Mycol. VII (1909) p. 533. — Soris in rimis corticis interioris vetusti longe elongatis, 0,5-2 cm. longis, cortici denigrato innatis; peritheciis gregariis v. singularibus, dein emergentibus, papillulatis, poro pertusis, 0,5 mm. diam, foveolam atram denique relinquenter. Ceterum ut in specie ipsa.

Hab. in ramis corticatis Aceris macrophylli, Washington Amer. bor. (E. T. et S. A. HARPER).

2. **Botryosphæria Jasmini** Chenant. in Bull. Soc. Sc. nat. Ouest France (1910) p. 14, t. IV, f. 3. — Peritheciis minutis ex matrice nigrificata seriatim erumpentibus v. in matrice intacta insidentibus, spheroideis, nigris, granulosis; ostiolis papillatis, conicis, obtusis; ascis stipitatis, clavatis v. cylindraceis apice, incrassatis, pseudoparaphysisibus articulatis obvallatis, 7-8-sporis; sporidiis distichis v. oblique monostichis, ellipsoideo-trigonis, inæqualibus, continuis, granulatis, hyalinis, 30-37 \approx 12-16, demum (extra ascos) 1-2-septatis, dilutissime aureis, ad septa subconstrictis.

Hab. in cortice Jasmini officinalis, villa Kernevèz, Monterelaxo in Gallia.

3. **Botryosphæria melioloides** Rehm, Ann. Mycol. V (1907) p. 524. 3613 — Peritheciis epiphyllis in folii superficie haud mutata in stroma orbiculare 2-3 mm. diam. usque ad 50 arcte congregatis, globulosis, atris giabris, poro perspicuo pertusis, siccis apice umbilicatis, 100-150 μ . diam., parenchymatice contextis; ascis clavatis, apice rotundatis incrassitisque, 60-65 \approx 15-17, 8-sporis; sporidis ellipsoideis utrinque obtusis, 1-cellularibus, hyalinis, 10-11 \approx 5-5,5, distichis; paraphysisibus filiformibus 2,5 μ . cr.

Hab. ad folia Compositæ (? Vernoniæ), São Paolo Bra-

siliæ (USTERI). — Habitus quasi *B. phyllachoroideæ*. In stromate occurruunt conidia 4-cellularia, hyalina, 20 \times 3 (speciei propria?).

4. **Botryosphaeria Phormii** Speg., Ann. Mus. Nac. Buenos Aires 3614 t. XIX (1909) p. 335. — Matrice laxe effuseque dealbata; peritheciis stromate pusillo constipatis, globosis, minutis, 120-130 μ . diam. atris, contextu indistincto opaco; ascis antice obtusissimis crasseque tunicatis, postice breviter noduloseque pedicellatis, 60-65 \times 20, octosporis, paraphysibus densis submucosis cinctis; sporidiis distichis utrinque acutiuscule rotundatis, 18-20 \times 7-9 leniter inaequilateralibus, grosse 1-guttulatis hyalinis.

Hab. ad scapos florales Phormii tenacis in hortis La Plata, Argentina Amer. austr.

Sect. 3. Phaeosporæ.

MÜLLERELLA Hepp — Syll. IX p. 495, XVII p. 593.

1. **Müllerella polyspora** Hepp — Syll. IX, p. 485. — var. microspora Ferr., Malpighia XX (1906) p. 141. — A typo dignoscitur sporidiis multo minoribus et non guttulatis.

Hab. in apotheciis Biatoræ luteolæ ad corticem Quercus, Alba Ital. bor. (Doct. G. FERRO). — Perithecia 120-140 \times 84; ascis 50-60 μ . longi, clavati; sporidia numerosissima, 2,5-3 \times 2.

PHÆOPHOMATOSPORA Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 339 (Etym. *phæos* fuscus et *Phomatospora*). — Est *Phomatospora* sporidiis fuligineis prædita.

1. **Phæophomatospora argentinensis** Speg., l. o. p. 339, cum icon. — 3616 Matrice saepius late irregulariterque infuscata; peritheciis minutissimis submembranaceis epidermide tectis dense gregariis, glabris, 90-100 μ . diam., ostiolo minuto impresso perforatis; ascis cylindraceis, brevissime pedicellatis, aparamphysatis, 70 \times 6-8; sporidiis oblique monostichis, ellipsoideo-navicularibus, parvulis, subopacis, 10-12 \times 4-5.

Hab. ad caules aridos subputrescentesque Conii maculati in arvis circa Santa Catarina, Buenos Aires, Rep. Argentina Amer. austr.

ANTHOSTOMELLA Sacc. — Syll. I p. 278, IX p. 505, XI p. 281, XIV p. 501, XVI p. 439, XVII p. 594.

1. **Anthostomella Sulla** Montemartini, Riv. Patol. vegetale IV (1910) p. 3617

p. 166. — Simplex; peritheciis gregariis, majusculis, submembranaceis, contextu distincto parenchymatico, globosis, 300-500 μ ., ostiolo brevi conoideo superficiem attingente, peridermio circa ostium vix erumpente denigrato tectis; ascis cylindraceis, 70-75 \times 8-9, breviter stipitatis, apice rotundatis, octosporis, paraphysatis; sporidiis oblique monostichis, utrinque rotundatis, continuis, olivaceo-fuscis, 13 \times 7,5, paraphysibus filiformibus, continuis, intus granulosis, ascos æquantibus.

Hab. in foliis vivis *Hedysari coronarii* (vulg. *Sulla*) Rimini, Italiae mediæ. — Socia forma pycnidica: *Leptothyrium Sulla* S. et T.: Maculis nigris; pycnidicis simplicibus, scutiformibus, membranaceo-atris, epidermide atrata et irregulariter erumpente tectis; sporulis limoniformibus, minutis, 3-4 \times 2.

2. **Anthostomella Cassinopsidis** Rehm, Ann. Mycol. IV (1906) p. 441 et V (1907) p. 545. — Peritheciis gregariis, innatis, epidermidem denigratam hemisphærice elevantibus, semper obtectis, modo papillula minuta poro perspicuo pertusa prominente, globosis, glabris, atris, carbonaceis, 1 mm. diam.; ascis cylindraceis, apice rotundatis, 300 \times 12-15, 8-sporis, jodii ope haud cœruleo-tinctis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, subfuscis, 18-20 \times 8-9, strato mucoso tenui obductis, 1-stichis; paraphysibus ramosis, septatis, 3 μ . cr.

Hab. ad ramulos Cassinopsidis ad Promontorium Bonæ Spei (MAC OWAN, comm. Dr. PAZSCHKE). — Affinis *Anth. africanae* et *Anth. Unedonis*.

3. **Anthostomella ?Lingue** Speg., Fungi Chilenses (1910) p. 37 cum icon. — Peritheciis subglobosis matrici infossa pauci-gregariis clypeo epidermico nigro nitido tectis, 120-150 μ . diam.; ascis linearibus octosporis 100-120 \times 5, paraphysibus nullis; sporidiis elliptico-subfusoideis utrinque acutis, pallide olivaceis, 11-13 \times 3-4.

Hab. in foliis putrescentibus Perseæ Lingue prope Ciudad de Valdivia Chile Amer. austr. — Forsan forma *Læstadiæ* (Guignardiae) *Lingue* Speg.

4. **?Anthostomella Bonanseana** Sacc., Ann. Mycol. VI (1908) p. 567. — Peritheciis gregariis, subcutaneo-erumpentibus, membranaceo-coriaceis, nigris, globosis, 200 μ . diam., apice obtusis ostiolo quo irregulariter circulari pertusis, contextu dense celluloso; ascis... non visis; sporidiis globosis levibus, atro-fuligineis, 7,5-8,5 μ . d.

Hab. in magnis ulceribus elevato-discoideis nec non circum ea

ad caules Cerei geometrizantis, Apaseo, Guanasirato Mexici, Junio 1908 (BONANSEA). — Etsi ascos nulos viderim, species potius *Anthostomella* quam *Sphaeropsis* mihi videtur.

5. ***Anthostomella bahiensis* (Hempel) Speg.**, in Rev. Facult. de Agro-nomia y Veterinaria, Buenos Aires II (1906) p. 304 et 310, f. A, *Calonectria bahiensis* Hemp. in Bol. da Agricult., n. 1. Janeiro (1904). — Peritheciis solitariis v. saepius gregariis subseriatis, cortice immutato innato-subsuperficialibus, hemisphaerico-conoideis, 1-1,5 mm. diam., 0,7 mm. alt., nigris nitidulis, ostiolo obsoleto demum perforatis, basi subapplanatis, carbonaceis, nucleo mucoso, demum pulverulento; ascis fugacissimis, fusoideo-subclavulatis, apice rotundatis, deorsum breviter cuneato-stipitatis, 200 \times 35-40, saepius hexasporis, a paraphysatis (?); sporidiis distichis, rhomboideo-ellipticis v. subnavicularibus, utrinque obtusulis, 60-70 \times 20-30, continuis, levibus, opace nigris.

Hab. ad ramos Theobromæ Cacao, Bahia Brasiliæ. — Habitus lichenoideus, sed gonidia et thallus nulli.

6. ***Anthostomella Arthrophylli* Koord.** Botan. Untersuchung. (1907) pag. 195, fig. 18 IV. — Peritheciis 1-4 in maculis orbicularibus parvis insidentibus, coriaceo-carbonaceis, glabris, globoso-depressis, peridermio circa ostiolum vix erumpens denigrato tectis, 120-150 μ . diam.; ascis oblongis, apice haud incrassatis 30-40 \times 10-16 octosporis, paraphysatis; sporidiis continuis, fuligineis, muticis, ovoido-oblongis, 15-22 \times 7-10, utrinque rotundatis, prope apicem transverse hyalino-annulatis.

Hab. in foliis Arthrophylli diversifolii prope Kaliwiro prov. Kedu insulæ Javæ, sept. 1905 (KOORDERS).

7. ***Anthostomella subconica* Rehm**, Ann. Mycol. V (1907) p. 537. — Peritheciis in caule plerumque haud denigrato dispersis vel gregariis, innatis, nigro-tectis, globulosis, ostiolo conico prominentibus, 0,5 mm. latis; ascis cylindraceis, apice rotundatis, 100-110 \times 10, 8-sporis; sporidiis ellipsoideis, saepe navicularibus, utrinque subacuteatis, 1-cellularibus, crasse 2-guttatis, fuscis, strato mucoso tenui obductis, 10-12 \times 5-7, 1-stichis; paraphysibus filiformibus, 3 μ . crassis.

Hab. ad caules siccis ?Compositæ in silva ad Kampenwand alpium Bavariæ (Dr. REHM). — Peritheciis majusculis et sporidiorum forma et magnitudine a ceteris speciebus caulicolis videtur distincta.

8. ***Anthostomella megacylindrica* Rehm**, Ann. Mycol. V (1907) p. 537. —

— Caulibus late extus denigratis; peritheciis gregariis, clypeiformiter atratis, innatis, conoideo- vel hemisphærico-prominentibus, globulosis, ostiolo subconico brevi perspicuo poro pertuso, ca. 0,4-0,7 mm. latis; ascis cylindraceis, 100-120 \times 10, octosporis; sporidiis ovoideis vel oblongis, utrinque obtusis, 1-cellularibus, fuscis, strato mucoso tenui obductis, 12-14 \times 7, monostichis; paraphysibus filiformibus.

Hab. ad caules putrescentes Labiatæ in faucibus infra Kastelruth Tirolia austr. (Dr. REHM). — Peritheciis majusculis, demum in matrice foveolam relinquenter, sporidiorumque forma facile dignoscitur.

9. **Anthostomella destruens** Shear, Bull. Torr. Bot. Club. XXXIV 3625 (1907) p. 313. — Peritheciis gregariis, submembranaceis, globosis v. subpiriformibus, 350-450 μ . diam., pro more vertice in ostiolum latiusculum pertusum productis; ascis octosporis, cylindraceis, subsessilibus, 200-232 \times 15-18, apophysatis; sporidiis breviter ellipsoideis subinde inæquilateralibus, monostichis, primo hyalinis, dein flavo-brunneis, demum atro-brunneis, opacis, 16-24 \times 10,5-12.

Hab. ad ramos ægros Vaccinii macrocarpi, New Jersey et inde culta. — Paraphysibus deficientibus a typo generis desicit.

10. **Anthostomella Osyridis** Bubák, Bull. Herb. Boiss. 2 sér. VI (1906) 3626 p. 402. — Peritheciis sparsis v. 2-3 confertis et ramos late occupantibus, cortice innatis, diu tectis, globosis, 70-130 μ . diam., ostiolo papillato erumpentibus et pro more clypeo atro cinctis; contextu laxe celluloso extus nigro, intus subolivaceo; ascis in quoque perithecio paucis oblongo-clavatis, apice tenuato-rotundatis, breviter abrupte pedicellatis, 60-80 \times 16-18, octosporis; sporidiis elliptico-fusoideis, 17-20 \times 5-6, utrinque rotundatis, læte castaneis, in asco superne monostichis, infra irregulariter positis, unicellularibus.

Hab. in ramulis emortuis Osyridis albæ, Ulcinj Montenegro.

11. **Anthostomella Elasticæ** Koord., Botan. Untersuch. (1907) p. 195, 3627 fig. 19 II. — Maculis nullis; pseudostromate vix conspicuo; peritheciis tectis, sparsis, coriaceo-carbonaceis, glabris, globosis, 120-150 μ . diam., epiphyllis, ostiolo breviusculo epidermidem perforante; ascis anguste vel crassiuscule cylindraceis, apice haud incrassatis, 60-65 \times 5-10, apophysatis, sessilibus, tenuibus, mox evanescentibus; sporidiis continua, atro-fuligineis, ellipsoideis, inæ-

quilateralibus, utrinque acutis, oblique monostichis, appendiculis, destitutis, 13-14 \approx 6-8.

Hab. in foliis putrescentibus Fici elasticæ prope Loano prov, Kedu ins. Java, majo 1906 (KOORDERS).

12. **Anthostomella Sequoiæ** Rehm, Ann. Mycol. V (1907) p. 525. — 3628
Peritheciis in maculis denigratis 1-2 mm. lat., demum late confluentibus innatis, plerumque singularibus, globulosis, subprominentibus, poro perspicuo pertusis, haud papillatis, nigris, glabris, 0,5 mm. lat.; ascis cylindraceis, 100 \approx 7, apice rotundatis, 8-sporis; sporidiis ellipsoideis, plerumque navicularibus, 1-cellularibus, 1-2-guttatis, fuscis, strato tenui mucoso obductis, 10-12 \approx 4-5, 1-stichis; paraphysibus filiformibus.

Hab. ad folium sicutum Sequoiæ, Sao Leopoldo, Rio grande do Sul, Brasilia (RICK S. J.). — *A. leucobasi* proxime affinis.

13. **Anthostomella Distachyæ** Maubl., Bull. Soc. Myc. Fr. XX (1905) 3629 p. 87, tab. VI, fig. 1. — *Peritheciis sparsis, atris, innatis, globosis, epidermide punctiformi-nigrificata tectis, 500 μ . diam., ostiolo brevi vix erumpentibus; ascis cylindricis, breviter stipitatis, 120-125 \approx 12-13, filiformi-paraphysatis; sporidiis monostichis, ovoides, utrinque obtusis, primum pallide fuscis, guttulatis, strato hyalino obvolutis, dein intense atro-fuscis, opacis, 13-15 \approx 7-8,5.*

Hab. in ramis Ephedræ distachyæ in arenosis pr. ostium ligericum (Loire) Galliæ.

14. **Anthostomella minor** Ell. et Ev. — Syll. IX, pag. 510 — var. 3630 *micasca* Starb., Ascom. Schw. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 25. — *Ascis (cum sporidiis monostichis) 50-54 \approx 3,5-4; (cum sporidiis partim distichis) 43 \approx 5,5; sporidiis 7,5-10 \approx 3-4.*

Hab. in ramulis aridis in prov. Jujuy Argentinæ. — Secundum descriptionem in Syll. IX, p. 510, specimina hæc a typo differunt forma ascorum et sporidiorum, sporidiis vix inaequalateralibus, saepe 4-5, distichis vel oblique transversim monostichis, utrinque acutiusculis, peritheciis sparsim gregariis, epidermidem nigricantem ostiolo cylindrico-conico perforantibus.

15. **Anthostomella Molleriana** Trav. et Spessa, Bol. Soc. Brot. XXV (1910) p. 169, t. I, f. 1. — *Peritheciis ad proximato-seriatis vel gregariis, cortice nigrificata tectis eamque pustulatim sublevantibus, interdum ostiolo vix erumpentibus, lenticularibus vel basi applanatis, atris; excipulo lateraliter stromatice effuso, 400-500 \approx 100-150, contextu indistincte pseudoparenchymatico, fuligineo-*

atro; ascis clavato-ventricosis, apice rotundatis, spurie paraphysatis, octosporis, 40-50 \times 14-18; sporidiis subdisticho-congestis, ovoideo-fusoideis, utrinque attenuato-rotundatis, initio hyalinis dein fuligineis, 12-14 \times 5-7.

Hab. in petiolis siccis Phœnicis dactyliferae in Horto botanico conimbricensi (A. MOLLER). — Ob perithecia circumcirca stromaticae dilatata, species ad *Auerswaldiam* nutat. Cfr. Traverso, *Fl. it. crypt.* Pyren. p. 484-486.

16. **Anthostomella constipata** (Mont.) Sacc. — Syll. XI, p. 282. — 3632
var. **diminuta** Rehm, in Tranzsch. et Serebrianikow, Mycotheca rossica, fasc. II, n. 73, (1910). — Sporidiis 10-12 μ ., strato mucoso 1 μ . cr. obductis; porus jodo cœrulescens.

Hab. in sarmenis Smilacis (?) in Rossia.

17. **Anthostomella Bromeliaceæ** Rehm, Ann. Mycol. V (1907) p. 525. 3633
— Peritheciis in peridermio haud denigrato, sed maculatim dealbato innatis, dispersis, clypeo orbiculari nigro obtectis, 1 mm. latis, globulosis, atris, modo poro perspicuo prominentibus; ascis cylindraceis 130 \times 6, octosporis; sporidiis fusiformibus, rectis, 1-cellularibus, guttulis 1-3 oleosis repletis, fuscis, 14 \times 3-3,5 monostichis; paraphysibus filiformibus, septatis, 3 μ . cr.

Hab. ad folium Bromeliaceæ, São Leopoldo, Rio Grande do Sul, Brasilia (RICK S. J.). — Affinis *Anthostomellæ eliminatae* (B. et C.) Sacc.

18. **Anthostomella puyæcola** Speg., Fungi Chilenses (1910) p. 38. — 3634
Maculis amphigenis pallescentibus indeterminatis; peritheciis minutis immersis, saepius epiphyllis, areola pusilla nigra cuticulari circa ostiolum donatis, 100 μ . diam.; ascis cylindraceis breviter pedicellatis, crasse paraphysatis 80-90 \times 5-6; sporidiis ellipsoideo-subnavicularibus, nudis, 8-10 \times 5-6.

Hab. in foliis emortuis putrescentibus Puya cœruleæ, Cerro S. Cristobal de Santjago, Chile, Amer. austr.

19. **Anthostomella vestita** Speg., Fungi Chilenses (1910) pag. 39. — 3635
Maculis amphigenis pallescentibus indeterminatis; peritheciis minutis, areola stromatica nigra eximie coronatis, 150-180 μ . diám.; ascis linearibus octosporis, breviter pedicellatis, parce paraphysatis 110-120 \times 12-16; sporidiis oblique v. transverse monostichis, ellipsoideis, non v. vix inæquilateralibus, fuligineis, subparvis, grosse-uninucleatis, 14-15 \times 9-10, tunica hyalina mucosa sat crassa vestitis.

Hab. in foliis emortuis Puya chilensis, Cerro Alegre de Valparaíso, Chile Amer. austr.

20. **Anthostomella ? Ionchosperma** Speg., An. Mus. Nac. Buenos Aires 3636 t. **XIX** (1909) pag. 340. — Maculis amphigenis sparsis repando-orbicularibus, 5-15 mm. diam., non impressis, obsolete determinatis, atris, per ætatem plus minusve pallescentibus; peritheciis epidermide tectis vix ostiolo minute papillato perforante manifestis, membranaceo-coriacellis, pusillis; ascis clavulatis aparaphysatis octosporis 110-120 \approx 20; sporidiis oblique monostichis, lanceolatis v. clavulatis, primo hyalinis serius fuligineis, 32-46 \approx 10, primum tunica mucosa hyalina vestitis et tunc 50-60 \approx 16-18.

Hab. ad folia viva Scirpi asperi in uliginosis insulae San-tjago prope La Plata, Amer. austr.

21. **Anthostomella punctata** (Rob. et Desm.) Sacc. — Syll. I, p. 278. 3637 — var. **Nardi** Rehm, Ann. Mycol. VII (1909) p. 408. — Ascis cylindraceis, apice truncatis et incrassatis, 90 \approx 8, octosporis; sporidiis obtuse ellipsoideis, plerumque subcurvatis, 1-cellularibus, grosse 2-guttatis, subfuscis, monostichis, 9 \approx 5-6.

Hab. in foliis siccis Nardi strictæ in M. Arber in silva Bavaria (REHM).

22. **Anthostomella Danthoniae** Mac Alp., Austral. Fungi Dec. I-II, 3638 p. 373 (Proceed. Linn. Soc. New S. Wal. 1902). — Minuta, nigra, gregaria, pustulata; peritheciis amphigenis, sed saepius hypophyllis, tectis, dense confertis, seriatis, ostiolo albo-circumzonato erumpentibus, saepè compressis; ascis cylindraceis vel undulatis, apice leviter tenuato-rotundatis, breviter stipitatis; octosporis, 140-150 \approx 19-20, interdum ob sporidia disticha usque ad 28 μ . cr.; sporidiis mono-distichis, brunneis, crasse tunicatis, ellipsoideis, 20-26 \approx 15-17; paraphysibus tenuibus, 0,5-1 μ . cr., ascos superantibus, hyalinis v. coacervatis rubentibus, granulosis.

Hab. in foliis vaginisque Danthoniae penicillatae, Ardmona Vict. Australiae (ROBINSON).

23. **Anthostomella rubicola** (Speg.) Sacc. et Trott., Entosordaria rubicola Speg., Fungi Chilenses (1910) p. 40, cum icon. — Peritheciis gregariis clypeo nigro communi tectis parvis, carbonaceis, 250 μ . diam.; ascis cylindraceis breviter pedicellatis octosporis paraphysatis 150 \approx 8-10; sporidiis cylindraceo-ellipsoideis, fuligineis grosse uninucleatis, 12 \approx 6, utrinque hyalino-caudatis, cauda supera majori, infima minima.

Hab. in ramos emortuos Rubi sancti prope Ciudad de Valdivia, Chile Amer. austr. — Ab *Ent. appendiculosa* (B. et B.) Sacc. differt ascis paraphysatis, sporidiis minoribus bicaudatis.

24. **Anthostomella perseicola** (Speg.) Sacc. et Trott., *Entosordaria* 3640
perseicola Speg., *Fungi Chilenses* (1910) p. 40, cum icon. — Peritheciis immersis laxe pauci-gregariis ad hypophyllum areola minuta nigra coronatis, 120-130 μ . diam.; ascis linearibus apophysatis, 120 \times 5-6, octosporis; sporidiis rectis, monostichis, fuligineis cylindraceo-ellipsoideis utrinque obtusissimis atque cauda unguiformi hyalina appendiculatis, 10-12 \times 6.
- Hab.* in foliis emortuis putrescentibus *Perseæ Lingue*, Cerro Caracol de Concepcion, Chile Amer. austr.
25. **Anthostomella valparadisiaca** (Speg.) Sacc. et Trott., *Entosordaria* 3641
valparadisiaca Speg., *Fungi Chilenses* (1910), pag. 41. — Amphigena; maculis ad epiphyllum subflavescentibus indeterminatis ad hypophyllum albescensibus indeterminatis v. saepe linea sinuosa stromatica nigra limitatis; peritheciis laxe gregariis omnino infossis, majusculis, clypeo nigro circa ostiolum donatis, 250-300 μ . diam.; ascis linearibus apophysatis breviter pedicellatis, 180-200 \times 10; sporidiis monostichis navicularibus utrinque globulo hyalino minuto appendiculatis, mediocribus, fuligineis, 24-26 \times 7-8.
- Hab.* in foliis emortuis putrescentibus *Puyæ chilensis*, Cerro Alegre de Valparaiso, Chile Amer. austr.
26. **Anthostomella micraspis** (Berk.) Sacc. et Trav. — *Syll. XIX*, 3642 p. 77, *Sphaeria micraspis* Berk.; in *Journ. of Bot.* (1842) p. 156, t. VII, f. 9; *Curr. Trans. Linn. Soc. XX* (1859) p. 321, t. 58, f. 59. — Peritheciis sparsis, globoso-depressis, ostiolo papilliformi, crustæ applanato-hemisphaericae innato-superficiali peritheciiformi immersis, parte prominente conico-hemisphaerica pertusa; ascis.... sporidiis fusoideis, rectis, utrinque obtusulis, maximis, 90 \times 20 (ex iconе *Curr.*) brunneis, strato angusto hyalino tectis.

Hab. in lignis ad crustam rubram lichenosam in insulis Philippinensis (H. CUMING). — Ex Currey l. c. forte *Verrucariæ* species.

PARANTHOSTOMELLA Speg., *Fungi Chilenses* (1910) p. 42 (Etym. *para* prope et *Anthostomella*). — Est *Anthostomella* clypeo nigro circa ostiolum destituta.

1. **Paranthostomella eryngiicola** Speg., l. c. p. 42 cum icon. — *Ma-* 3643 culis amphigenis pallescentibus indeterminatis; peritheciis parenchymate immersis, ostiolo nigro punctiformi coronatis, 200-250 μ . diam.; ascis subclavulatis, apophysatis, 120 \times 20-22, octosporis;

sporidiis distichis, elliptico-fusoideis, utrinque acutissimis, exappendiculatis, obscure fuligineis, 32-34 \times 10-11.

Hab. in foliis emortuis *Eryngii* paniculati, Cerro Caracol de Concepcion Chile Amer. austr.

2. *Paranthostomella valdiviana* Speg., Fungi Chilenses (1910) p. 44, 3644 cum icon. — Maculis nullis; peritheciis innato-erumpentibus subglobosis, atris, subcarbonaceis 100-120 μ . diam.; ascis linearibus a paraphysatis, breviter pedicellatis, octosporis, 70-75 \times 7-8; sporidiis ellipsoideo-subnavicularibus, basi globulo hyalino auctis, fuligineis, nudis, 10-11 \times 5, plerumque biguttulatis.

Hab. in foliis dejectis putrescentibus *Persea* Lingue prope Ciudad de Valdivia, Chile Amer. austr.

3. *Paranthostomella unciniicola* Speg., Fungi Chilenses (1910) p. 43, 3645 cum icon. — Paraentosordaria; maculis nullis; peritheciis globosis immersis 90-110 μ . diam.; ascis linearibus breviter pedicellatis paraphysatis, octosporis, 70-75 \times 5-6; sporidiis monostichis, navicularibus, fuligineis, parvis, apice infero globulo hyalino auctis, 10-12 \times 4-4,5, tunica mucosa tenui vestitis.

Hab. in foliis emortuis *Unciniae erinaceæ* prope Ciudad de Valdivia, Chile Amer. austr.

BOMBARDIA Fr. — Syll. I p. 277, XVI p. 435.

1. *Bombardia comata* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII 3646 (1906) p. 50. — Peritheciis sparsis, nigris, hemisphaericis, basi lata sessilibus, membranaceis, papilla brevi nitidula præditis, qua excepta, brunneo-tomentosis, 300-400 μ . diam., pilis tenuibus, flexuosis, ramosis 2 μ . cr.; ascis tereti-clavatis, sursum obtuse rotundatis, longiuscule stipitatis, 120-150 \times 16-18, octosporis; sporidiis oblique monostichis v. disticho-conglobatis, primo cylindraceis, utrinque rotundatis, copiose guttulatis, 25-35 \times 5-6, dein ovoideis, atro-brunneis, vertice obtuse conoideis, basi applanatis, ibique appendice hyalina, recta, sporidi diam. æquante auctis, 16-18 \times 10-11; paraphysibus copiosis, filiformibus, ramosis.

Hab. in ligno populino decorticato, udo, in Havel prope Rathenow Borussiæ.

ROSELLINIA De Not. — Syll. I p. 252, IX p. 495, XI p. 280, XIV p. 494, XVI p. 435, XVII p. 595.

1. *Rosellinia Pepo* Patouill., Bull. Soc. Mycol. Fr. XXIV (1908) 3647 p. 9, cum icon. — Peritheciis sparsis v. gregariis, subiculo cru-

staceo conidifero insidentibus, globosis, substipitatis, 2,5-3 mm. diam., atro-brunneis, carbonaceis, ostiolo conico atro-nitenti semper clauso areola planiuscula obscuriori cincto donatis; ascis elongatis apice capitatis, obturaculo ovoideo, jodi ope cærulecenti præditis, inferne longe attenuatis, 8-sporis, 10-12 μ . latis; paraphysibus numerosis, linearibus; sporidiis brunneis, rectis, fusiformibus, utrinque acutis, magnis, 62-67 \times 8-9, halone hyalino utraque fine auctis dein nudatis.

Hab. in cortice Hymenææ Courbaril, Guadalupa (Duss). — Adsunt setulæ conidiferae erectæ (*Graphium*) 1-3 mm. altæ, 30-60 μ . latæ, ex hyphis brunneis septatis, 4-6 μ . cr. compositæ, subiculo crustaceo sitæ; conidiis non visis.

2. **Rosellinia opuntiicola** Speg., An. Mus. Nac. Buenos Aires t. XIX 3648 (1909) p. 338. — Peritheciis subconoideis, densiuscule constipatis primo ostiolo crasse umbonato tantum exertis, crusta pulverulenta alba vestitis dein denudatis, atris, glabris submembranaceis, contextu pellucido sed indistincto, atro-fuligineo; ascis apice truncatis deorsum breviter cuneato-pedicellatis, 150-160 \times 25-30, paraphysibus filiformibus commixtis; sporidiis octonis rectis v. oblique distichis navicularibus utrinque subacutiusculis medio turgidulis, 30-40 \times 14-16, non v. 2-guttulatis, atro-fuligineis.

Hab. ad lignum denudatum Opuntiæ Fici-indicæ prope Villa Maria Rep. Argentina, Amer. austr.

3. **Rosellinia andina** Speg., An. Mus. Nac. Buenos Aires t. XIX 3649 (1909) p. 337. — Matrice cortice orbata late diffuseque infuscata; peritheciis semiexertis basi ligno insculptis, parvis 150-160 μ . diam., semper glabris, minute papillato-ostiolatis; ascis constipatis antice subtruncatis postice brevissime cuneato-pedicellatis, paraphysibus longioribus filiformibus obvallatis, 100 \times 10-12, octosporis; sporidiis rectis v. oblique monostichis, e fronte ellipsoideis e latere lenticulari-compressis, levibus, 14-15 \times 9-10, eguttulatis.

Hab. ad ramos emortuos Patagonii pinifolii in rupestribus prope Puente del Inca, Rep. Argentina Amer. austr.

4. **Rosellinia emergens** (B. et Br.) Sacc. — Syll. I, p. 257. — var. **bambusicola** Theiss., Ann. Mycol. VI (1908) p. 351. — Peritheciis arcte aggregatis (typice) vel subsparsis, depresso globosis 600-800 μ . diam. atris subnitentibus, ostiolo acuto nitido brevi, demum minutissime pertuso, serius e mycelio velutino emergentibus; subiculo brunneo-atro, tenui sed densissimo, continuo, velutino; ascis evanidis; sporidiis griseo-fuligineis, intus granulatis, rectis, raro pla-

noconvexis, utrinque subacutis, fusoideis, 55-80 \times 15-22 (interdum 90 μ . æquantibus).

Hab. ad culmos subputridos Guaduæ, São Leopoldo, Brasilie. — Perithecia circa papillam sepe areola (interdum dupliqui) applanata insignita. Cum *Ros. decipienti* Penz. et Sacc. non comparanda. An hoc *Ros. sepulta* (B. et C.) Sacc.?

5. **Rosellinia valdiviensis** Speg., Fungi Chilenses (1910) p. 46, cum 3651 icon. — Peritheciis solitariis v. pauci-gregariis primo tectis dein erumpenti-superficialibus subglobosis mediocribus, 500-800 μ . diam., papillato-ostiolatis carbonaceis, glabris levibus; ascis cylindraceis breviter pedicellatis, subparaphysatis, 110 \times 15, octosporis; sporidiis elliptico-elongatis, biguttulatis fuligineis, levibus 18-20 \times 9-10.

Hab. in ramis emortuis putrescentibus Perseæ Lingue prope Ciudad de Valdivia, Chile Amer. austr. — *Ros. mammoidea* (Cke.) Sacc. affinis.

6. **Rosellinia procera** Syd., Ann. Mycol. VIII (1910) p. 37. — Peritheciis sparsis vel aggregatis, glabris, globosis, firmis, 1 mm. diam., distincte papillatis, atris, e subiculo denso tomentoso fusco late effuso adnato persistenti emergentibus; ascis late cylindraceis, apice rotundatis, 4-(?)sporis, 120-160 \times 25-35; sporidiis fusiformibus, utrinque saepius attenuatis, continuis, fuscis, 70-140 \times 12-23, exappendiculatis, tunica mucosa hyalina tenuissima vestitis.

Hab. ad corticem, Davao, Mindanao (E. B. COPELAND). — A *R. aquila*, cui habitu accedit, mox distinguitur sporidiis multo majoribus.

7. **Rosellinia australis** Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 337. — Peritheciis primo subiculo violaceo-gossypino omnino tectis, serius denudatis, hinc inde dense constipatis globulosis 1,25-1,75 mm. diam., fusco-atris opacis levibus, superne non v. obsoletissime applanato-areolatis, centro minute eximieque papillato-ostiolatis, duris, carbonaceis; ascis quandoque cylindraceis quandoque subfusoideis 140-150 \times 10-12, antice rotundato-subtruncatis deorsum breviuscule cuneato-pedicellatis, octosporis, paraphysisibus filiformibus guttulatis longioribus obvallatis; sporidiis oblique mono- v. distichis, navicularibus, 20-22 \times 8, primo tunica tenui hyalina obvolutis atque caudicula subglobosa etiam hyalina auctis, serius nudis, opacis, fuligineis.

Hab. ad ligna putrida in hortis La Plata, Rep. Argentina Amer. austr. — Species statum ascophorum *Rostafinskiae australis* Sp. sistit.

8. *Rosellinia Desmazierii* (B. et Br.) Sacc. — Syll. I, pag. 254. — 3654
var. *acutispora* Theiss., Ann. Mycol. VI (1908) p. 350. — Ascis
breviter pedicellatis, supra obtuse rotundatis, p. sp. 200-260 \approx 8-
10; sporidiis octonis, atris, lanceolatis, rectis curvulisve, acutissi-
mis, appendice destitutis 42-50 \approx 6-7; paraphysibus copiosis filifor-
mibus; peritheciis brunneis, papillâ minuta atra instructis.

Hab. ad ligna emortua, São Leopoldo Brasiliæ. — Subiculum
speciem *Graphio Desmazierii* Sacc. peraffinem sistit. A typo differt
sporidiis majoribus utrinque acutissimis. Differt quoque a *Rosell.*
bunodi (B. et Br.) Sacc. peritheciis non verrucosis.

9. *Rosellinia Bresadolæ* Theiss., Ann. Mycol. VI (1908) p. 351. — 3655
Peritheciis aggregatis, conico-ovatis, 1 mm. altis, verrucoso-
scruposis, atris, sub lente griseo-leprosis, papillatis, circa papillam
pro more applanatis vel etiam, papillâ usque ad 600 μ . protractâ,
rostratis; subiculo obsoleto vel, peritheciis magis sparsis, subnullo,
brunneo-atro; ascis cylindricis, octosporis p. sp. 200-220 \approx 15; spo-
ridiis atris, rectis v. plano-convexis v. curvatis, utrinque attenua-
tis, 30-40 \approx 10-13.

Hab. ad ligna emortua, São Leopoldo Brasiliæ. — Perithecia
interdum, sed raro, breviter stipitata. A cl. Bresadola ut n. sp. de-
clarata. Cf. Rick « Pilze aus Rio Grande do Sul » (Broteria 1906,
pag. 50, cum icono T. I, f. 4) sub *Xylaria microcephala* Mont. —
Var. *minor* Theiss., l. c. — Differt peritheciis paullo minoribus,
confertioribus sporidiisque minoribus; ascis 160-180 \approx 9-11 p. sp.,
pedicello usque ad 120 μ . longo; sporidiis oblongo-fusoideis, brun-
neo-atris, utrinque attenuatis, gutta una magna vel pluriguttatis,
27-36 \approx 8-10. Cum typo.

10. *Rosellinia tricolor* Theiss., Ann. Mycol. VI (1908) pag. 351. — 3656
Subiculo obsoleto; peritheciis confertis brunneis, 500-700 μ . diam.,
globosis, supra plerumque applanatis, papilla atra, ostiolo pertuso
griseo-annulato; ascis p. sp. 200-230 \approx 13-15; sporidiis oblongis,
rarius late ellipticis, atris, rectis vel plano-convexis vel curvulis,
typice grosse 1-guttatis, 32-45 \approx 12-15.

Hab. in ligno putrido, São Leopoldo Brasiliæ.

11. *Rosellinia aquila* (Fr.) De Not. — Syll. I, p. 252. — var. *pal-* 3657
micola Theiss., Beih. Bot. Centralbl. Bd. XXVII (1910) Abt. II,
p. 392. — Peritheciis subiculo lilacino-griseo furfuraceo insidenti-
bus, dense gregariis, ad tertiam v. medianam partem liberis, æstate
glabris, liberis (ob reductionem et evanescientiam subiculi) discretis,
atris, asperulis, opacis, globosis, c. 1 mm. diam., papilla crassa

conica, subacuta, pulverulenta, aterrima; sporidiis atris, oblongis v. ellipsoideis, utrinque rotundatis, rarius acutiusculis, 25-32 v. 8-10, grosse 1-guttulatis.

Hab. in ligno Palmarum, Sao Leopoldo Rio Grando do Sul Brasiliae. — A typo differt colore et evanescencia subieuli.

12. **Rosellinia hyalospora** Theiss., Ann. Mycol. VI (1908) p. 351. — 3658
Peritheciis membranaceo-carbonaceis, fragilibus, arcte gregariis, globosis, 300-500 μ . diam., late brunneis, subnitentibus, papilla atra pro ratione crassa instructis, basi immersis, ætate fusco-griseis; subiculo atro-pulverulento, tenuissimo, facile evanido vel omnino nullo; ascis cylindricis, octosporis, obtuse rotundatis, p. sp. 130-160 v. 9-10; sporidiis oblongo-fusoideis utrinque acutatis vel angustato-rotundatis, irregulariter rotundatis, hyalinis, 22-27 v. 7-8.

Hab. ad ligna corticata, Sao Leopoldo Brasilia. — Ubi sporidia jugiter hyalina maneant, species a typo generis separanda est. An potius *Wallrothiellæ* spec.?

13. **Rosellinia smilacina** Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 339. — Matrice immutata v. plus minusve infuscata; peritheciis hemisphæricis innato-superficialibus laxe gregariis serius glabris, vix papillato ostiolatis, carbonaceis, 400-600 μ . diam.; ascis cylindraceis dense constipatis, antice obtuse rotundatis, postice brevissime pedicellatis, apophysatis, octosporis, 100-125 v. 8-15; sporidiis eximie ellipsoideo-navicularibus, 16-20 v. 8-10, primo tunica hyalina tenui vestitis dein denudatis, fuligineis.

Hab. ad sarmenta Smilacis campesstris, Parque Roca pr. Tucuman, Rep. Argentina Amer. austr.

14. **Rosellinia abscondita** Rehm, Hedw. XXVIII (1889) p. 356, non 3660
*Tassi (1900) — Syll. XVI, p. 436 — quæ nunc *R. senensis* Trav. Fl. it. crypt. Pyr. pag. 459. — Peritheciis plerumque gregariis, sessilibus, subglobosis, basi lata insidentibus, apice conideo-papillatis, fusco-nigris, scabris, duriusculis, parenchymaticis, 0,3-1 mm. diam.; ascis cylindraceo-clavatis, apice incrassatis, 120 v. 15, octosporis; sporidiis fusoideis v. subellipsoideis, rectis v. subcurvatis, 1-cellularibus, crasse 1-2-guttatis, 18-24 v. 4,5-5,5, primitus hyalinis, dein fuscis, strato mucoso 3-4 μ . cr., obductis, 1-2-stichis; paraphysibus filiformibus, guttulatis, 3-4 μ . cr.*

Hab. intra fasciculos foliorum graminis siccorum juxta glaciem æternam, Hochjoch vallis Oetz Tirolæ.

15. **Rosellinia geophila** B. R. S. in Saccardo, Not. Myc. VI, Ann. 3660*

Myc. v. III (1905) pag. 508. — Peritheciis sparsis v. interdum dense gregariis, conoideis, 300-350 μ . diam., carbonaceis, nigris, setulis rigidis, continuis, levibus, apice acutulis, fuligineis, 45-60 \times 4-4,5 undique ornatis, in mycelio e pilis flexuosis, septatis olivaceis formato semi-immersis; contextu carbonaceo; ascis cylindraceis, tenui-tunicatis, octosporis, 156-200 \times 15-17, paraphysibus granulosis confusis obvallatis; sporidiis monostichis, ellipsoideis, 24-30 \times 12-14, opace fuligineis.

Hab. ad terram arenosam inter muscos, La Panne pr. Furnes Belgii (M. ROUSSEAU). — Species prædicta, forte e radiculis Barbulæ sp. oriens. Ad subgen. *Coniochætem* spectat.

16. **Rosellinia subverruculosa** Rehm, Ann. Mycol. V (1907) p. 526. 8661
— Peritheciis peridermio fuscidulo late expanso gregarie insidentibus, dein erumpentibus, lata basi sessilibus, subconicis, minutissime papillulatis, nigris, glabris, demum distincte verrucosis, carbonaceis, ca. 0,8 mm. diam.; ascis evanidis; sporidiis subnavicularibus, utrinque obtusis, 1-cellularibus, fuscis, 21-24 \times 10-11.

Hab. ad calamum Bambusæ, São Leopoldo, Rio grande do Sul, Brasilia (RICK S. J.) — *Ros. sublimbatæ* proxima. Ad subg. *Tassiellam* pertinet.

17. **Rosellinia nectrioides** Rehm, Ann. Mycol. VI (1908) p. 324. — 3662
Peritheciis in mycelio pulvinato, crasso, roseolo, ca. 1-1,5 mm. lato et alto, per epidermidem laciniatim disruptam emergente usque ad 20 arcte congregatis, sessilibus, conoideis, fusco-nigris, glabris, in ostium conoideum breve, nigrum elongatis, ca. 0,5 mm. diam., carbonaceis; ascis cylindraceis, perlóngis, p. sporif. 120 \times 10, octosporis; sporidiis fusiformibus, utrinque subacutatis, rectis, interdum paullulum inaequilateralibus, unicellularibus, subfuscis, 18-20 \times 5, monostichis; paraphysibus filiformibus.

Hab. ad ramulum Cratægi sanguineæ, ad Inst. botan. silviculturæ Petropolitanum (Dr. TRANZSCHEL). — *R. andurnensi* affinis.

18. **Rosellinia catacrypta** Rehm, Ann. Mycol. V (1907) p. 537. — 3663
Peritheciis globosis, minutissimis, poro vix perspicuo pertusis pro maxima parte cortice semiimmersis, demum foveolam denigratam relinquentibus, gregariis, 150 μ . diam., contextu parenchymatico fusco-viridi; ascis cylindraceis, octosporis, 120 \times 8; sporidiis elliptico-oblongis, obtusis, interdum subcurvatis, dilute fuscidulis, 1-cellularibus, nucleo centrali magno præditis, 15-20 \times 6-7, monostichis; paraphysibus ramosis, ascos superantibus.

Hab. in cortice Piri Mali et Cerasorum prope Sugenheim Franconiae mediæ (Dr. REHM). — Imprimis peritheciis minutissimis, fere abditis mox dignoscenda species. E subgen. *Amphispharellæ*.

19. *Rosellinia sancta-cruciana* Ferd. et Winge, Botanisk Tidsskr. 3664 XXIX (1908) p. 16, tab. II, fig. 4. — Peritheciis subiculo nullo, sulcis internerviis petioli insidentibus, superficialibus, subglobosis, papillula semigloboso-conoidea, brevi, nitenti (nonnumquam disculo insidente) præditis, $\frac{1}{2}$ - $\frac{3}{4}$ mm. diam., ferrugineo-pruinosis, atro-fuscis; ascis anguste clavatis, superne rotundatis, in pedicellum longum leniter attenuatis, ostiolo jodi ope intense cærulecente, 150-200 (parte sp. 80-110) \times 10-13; sporidiis irregulariter monostichis subdistichisve, octonis, oblongo-ellipsoideis, subnavicularibus, obtusulis v. breviter acutatis, tunica mucosa anguste adjacente, utrinque appendiculam saccato-subglobosam, hyalinam 3-5 μ . cr. formante indutis, 16-20 \times 6-7,5, 2-4-guttulatis, atro-castaneis; paraphysibus filiformibus, septatis, 3 μ . cr., ascos superrantibus, evanescentibus.

Hab. ad petiolum siccum Cocoës nuciferæ in insula St. Croix Indiæ occ. (RAUNKIAER).

20. *Rosellinia cinereo-violascens* Starb., Ascom. Schwed. Chaco-Cordill Exp., Arkiv f. Bot. V (1905) p. 17. — Peritheciis inter fasciculos rigidos, rugosissimos, erectos, ex hyphis densissime conglutinatis, fuscis, inæqualibus, septatis, 3,5-6 μ . crassis compositos orientibus, confertissime aggregatis, confluentibus et crustam longe lateque effusam facile formantibus, superficialibus, sphaeroides, vertice subapplanatis, vix papillulatis, poro minutissimo, areola nigra cincto perforatis, pulvere cinereo violascente ceterum obtectis, demum, jam evacuatis, crusta fere stromatica insidentibus, totis nigris, $\frac{1}{2}$ -1 mm. diam.; contextu densissimo, molliusculo, fere coriaceo-carbonaceo; ascis octosporis, cylindraceis vel anguste cylindraceo-clavatis, sursum rotundatis, deorsum longe pedicellatis, 85-100 \times 7,6 (p. sp.), cum pedicello circa 165 μ . longis; sporidiis monostichis, ellipsoideis, inæquilateralibus, utrinque acutiusculis, sæpe guttulatis; paraphysibus numerosis, filiformibus, hyalinis.

Hab. in truncis mucidis humi jacentibus prope Laguna de la Brea prov. Jujuy Argentinæ et in Bolivia.

21. *Rosellinia breenensis* Starb., Ascom. Schwed. Chaco-Cordill. Exp., 3666 Arkiv f. Bot. Bd. V (1905) p. 17. — Peritheciis superficialibus, basi paullum infossis, longe lateque gregariis, sæpe confertissimis,

crustam formantibus, hemisphaericis, vertice semper applanatis, minute sed manifestim papillatis, carbonaceis, atratis, $\frac{1}{2}$ -1 mm. diam.; ascis octosporis, cylindraceis, sursum obtusis, longissime pedicellatis, jodo in areola minuta ad apicem cærulescentibus, 50-65 \times 6-7,5 (p. sp.); sporidiis dense vel imbricatim vel oblique monostichis, irregulariter ellipsoideis, inaequilateralibus, uni- vel saepissime bi-guttulatis, fuscis, 9-11 \times 5-5,5; paraphysibus longissimis, latiusculis, mucilaginosis, multiguttulatis, c. 2,5 μ . crassis.

Hab. ad trunco arido pr. Laguna de la Brea, prov. Jujuy Argentinæ. — *R. Linderæ* Peck peraffinis videtur, forma autem sporidiorum differt; *R. impositæ* Schw. quoad habitum affinis, sed sporidiis multo majoribus diversa.

22. *Rosellinia elæospora* Sacc. et Fairm., in Saccardo, Microm. A-3667 mer. novi, Journ. of Myc. XII (1906) p. 48. — Peritheciis late et dense gregariis, superficialibus, globosis; glabris, circ. $\frac{1}{2}$ mm. diam., papillatis, senio papilla amissa perforatis, carbonaceis, nigris; ascis tereti-elongatis, deorsum tenuato-stipitatis, 60 \times 7-8, octosporis, filiformi-paraphysatis; sporidiis oblique monostichis, elliptico-navicularibus, inaequilateris, utrinque obtusatis, 13-15 \times 4,5-5, rarius usque ad 16 \times 5,6, fumoso-olivaceis, 2-3-guttulatis v. granulosis.

Hab. ad trunco putrescentes dejectos in silvis pr. Lydonville, N. Y. Amer. bor. — Præsertim sporidiis fumoso-olivaceis dignoscitur.

23. *Rosellinia metachroa* Ferd. et Winge, Botanisk Tidsskr. XXIX 3668 (1908) p. 16, tab. II, fig. 3. — Subiculo nullo; peritheciis matrice inquinata insidentibus, superficialibus, dense gregariis saepeque in plagiulas subeffusas confluentibus, globosis, usque ad $\frac{3}{4}$ mm. diam., pruina primo rubro-fusca, deinde cinereo-glaуca, persistenti obtectis, superne nudis, atro-fuscis, subpapillatis, poro vix visibili perforatis; ascis lineariter cylindraceis, poro jodi ope cærulescente, in pedicellum longum leniter attenuatis, 135-170 (parte sp. 75-100) \times 6,5-8; sporidiis octonis, monostichis, oblongo-ellipsoideis, e latere visis utrinque acutiuscule rotundatis, subnavicularibus, 13-16 \times 5,5-6,7, 2-pluriguttulatis, atro-fuscis; paraphysibus filiformibus, longis 2-4 μ . cr., apice jodo cærulescentibus.

Hab. ad lignum corticatum v. nudum in insulis St. Croix et St. Jan Indiæ occ. (RAUNKIAER). — Species *Ros. cinereo-violascens* Starb. proxima sed absentia subiculi, caracteribus pruinæ, habitu non stromatico sat diversa.

24. *Rosellinia pulchella* Syd., in De Wildem., Flore Bas-Moy. Congo 3669 t. III, fasc. I (1909) p. 17. — Peritheciis in ligno late nigrificato superficialibus crustaceo-aggregatis, dense et aequa congestis, subconfluentibusque, globosis, levibus, griseo-lilacinis, ostiolo distincto papilliformi nigro, c. 350-400 μ . diam., carbonaceis; ascis cylindraceis, longe pedicellatis, p. sp. 55-80 \approx 6-7, octosporis; sporidiis oblique monostichis, ellipsoideis, utrinque obtusis, fuscis, 1-cellularibus, 8,5-12 \approx 4-5,5; paraphysibus filiformibus, numerosis.
Hab. in ligno decorticato, Kisantu, Congo, jan. 1907 (VANDERWYST). — Subgeneri *Coniomela* pertinet.
25. *Rosellinia similis* Sacc., Ann. Mycol. VI (1908) p. 564. — Peritheciis laxe gregariis, globosis, superficialibus, minutis, nigris, levibus, apice breviter obtuse papillatis, 160-200 μ . diam.; ascis cylindraceis breviter stipitatis, apice obtusulis, filiformi-paraphysatis, 60-70 \approx 7, octosporis; sporidiis monostichis ellipsoideis, 14 \approx 7, fuligineis, 1-guttatis.
Hab. in truncis corticatis dejectis in silvis Lyndonville N. Y., Amer. bor. socia *Nectria episphaeria* (FAIRMAN). — Ab affini *R. rimulicola* distinguitur peritheciis omnino levibus, sporidiis paullo longioribus, guttulatis.
26. *Rosellinia rhachidis* Pat., Bull. Soc. Myc. de Fr. XXII (1906) 3671 p. 57. — Peritheciis sparsis, numerosis, in maculis dealbatis latissimis laxe approximatis, basi insculptis, subglobosis, 0,3-0,5 mm. diam., atris, carbonaceis, ostiolo conico-papillato; ascis 8-sporis, cylindraceis; sporidiis monostichis, ellipsoideis, atro-brunneis, saepe biguttulatis, 10 \approx 5.
Hab. in rhachide foliorum Cocoës nuciferæ, Motu Papeateei Polynesiae gallicæ.
27. *Rosellinia Cocoës* P. Henn., Hedwigia XLVII (1908) p. 256. — 3672 Peritheciis gregariis superficialibus hemisphaericis v. subglobosis, atro-carbonaceis, pruinosis, subrugulosis, ad ostiolum papillatum sublevibus, ca. 0,7-1 mm. diam.; ascis cylindraceo-clavatis, obtusis, 8-sporis, paraphysatis, 90-100 \approx 7-8; sporidiis oblique monostichis, ellipsoideis, inaequilateralibus, obtusiusculis vel acutiusculis, atris, 13-16 \approx 6-8.
Hab. in pedunculis emortuis Cocoës nuciferæ, Mindanao, Davao Ins. Philippin. (COPELAND).
28. *Rosellinia Bambusæ* P. Henn., Hedwigia XLVII (1908) p. 256. 3673 — Peritheciis culmicolis, gregariis, superficialibus, subhemisphaericis, atro-carbonaceis, rugulosis, papillato-ostiolatis, ca. 0,5-1 mm.

diam.; ascis cylindraceis, 8-sporis, plerumque secedentibus; sporidiis oblique monostichis, oblongis, obtusis, atro-brunneis, 8-11 \approx 3-3.5.

Hab. in ramis emortuis *Bambusa*, Luzon, Prov. Pampanga Mt. Aruyat, Ins. Philippin. (MERRILL). — A *Ros. gasteroide* E. et E. diversa.

29. **Rosellinia Rickii** Bres. in Rick Fungi austro-amer. fasc. III-IV 3674 n. 53, Ann. Myc. v. IV (1906) p. 310. — A *Rosellinia griseo-cincta* Starb. videtur tantum differre peritheciis pellicula albida initio omnino tectis, non anulo mucidineo griseo-cinctis.

Hab. ad trunco in Brasilia.

30. **Rosellinia cuprea** Rick, Broteria V (1906) p. 46. — Peritheciis 3675 subiculo rufo-citrino tectis, dein liberis, cupreo-sanguineis, glabris, splendentibus, ostiolis nigris $\frac{1}{2}$ mm. diam., aggregatis in formam *Hypoxyli*, intus initio citrinis; ascis 80 \approx 10; sporidiis atro-brunneis 10-15 \approx 7, apice saepe truncato; paraphysibus conglutinatis.

Hab. in ramis corticatis Ingæ, Rio Grande do Sul Brasiliæ.

31. **Rosellinia Victoriae** Syd., Ann. Myc. VI (1908) p. 483. — Subicuculo albo late effuso, tandem sordide albo et plus vel minus evanescente; perithecis plerumque dense gregariis confertisque, primo subiculo immersis, dein erumpentibus et subliberis, late globoso-conicis, levibus, atris, opacis, carbonaceis, papillatis, circa papillam saepe albis, 300-600 μ . diam.; ascis anguste cylindraceis, longe pedicellatis, 60-80 \approx 5-7, octosporis; sporidiis monostichis, fusoideis, inaequilateris, continuis, obscure brunneis, 9-11 \approx 5-6.

Hab. ad trunco e corticatos, County of Follett, Victoria, 1907 (F. M. READER).

32. **Rosellinia Bakeri** Ellis in Torreya V (1909) p. 87. — Peritheciis 3677 sparsis vel 3-6 aggregatis, vel 3-4 seriatim dispositis, sed haud confluentibus, globosis, leniter asperulis, ostiolo minute papilliformi atro excepto, basi ligno paullum immersis, $\frac{1}{2}$ mm. diam.; ascis cylindraceis, breviter stipitatis, p. sp. 55-65 \approx 7-8; sporidiis monostichis, acute ellipticis, praecipue uno fine acutis, subinaequilateris et leniter compressis, 8-10 \approx 4-4 $\frac{1}{2}$.

Hab. ad ramos emortuos Ureræ spec. Nicaragua (C. F. BAKER). — Differt ab *R. compressa* peritheciis majoribus sporidiisque minoribus.

33. **Rosellinia variospora** Starb., Ascom. Schwed. Chaco - Cordill. 3678 Exp., Arkiv f. Bot., Bd. V (1905) p. 18, fig. 12. — Peritheciis sparsis, interdum subconfertis, primo plane immersis, vertice prominulis, deinde liberatis, reliquiis matricalibus dispersis, sphaeroi-

deis, minutissime papillulatis, mollissime verruculosis, contextu carnosò-coriaceo, nigro, 250-300 μ . diam.; ascis octosporis, cylindraceis, sursum rotundatis, brevissime pedicellatis, 50-63 \approx 6-7,5 (p. sporif.); sporidiis plerumque oblique et imbricatim monostichis, rarissime mediis distichis, forma quam maxime varii, breviter fusoideis, utrinque fere acutiusculis vel ellipsoideis utrinque obtusis vel non raro orbicularibus, 10-13 \approx 5-6,5 vel 6-8 μ . diam.; paraphysibus copiosis, filiformibus, hyalinis.

Hab. in truncis aridis Salicis ad Rio Pilcomayo Boliviæ. — Sporidiis forma quam maxime varia distincta videtur hæc species, quæ textura quoque valde a genere abhorret. Potius e subgen. *Amphisphaerella*. An *Anthostomella*? — Var. *foliicola* Theiss., Beih. Bot. Centralbl. Bd. XXVII (1910) Abt. II, p. 394. — A typo differt peritheciis majoribus nempe 0,6-0,8 mm. diam. et distincte papillatis. — In foliis Rubiaceæ arborescentis in Brasilia.

34. **Rosellinia callimorphoides** Rehm, Ann. Mycol. V (1907) p. 537. 3679

— Peritheciis 6-30 in soros subrotundos congregatis, primitus ligno semiimmersis, conoideis, rarius hemisphaerico-globosis, demum sessilibus, atris, subnitidis, in papillulam brevem conspicue pertusam abeuntibus, 0,5 mm. diam., subcarbonaceis; contextu parenchymatico fusco; ascis cylindraceis, octosporis, 100 \approx 6-8; sporidiis oblongis, plerumque rectis, obtusis, 1-cellularibus, fuscis, 14-15 \approx 4,5, monostichis; paraphysibus filiformibus, hyalinis, longis, ca. 3 μ . crassis.

Hab. ad trabes Pini Cembrae infra Sulden, Ortler, alpium Tiroliæ, alt. ca. 2000 m. (Dr. REHM). — Ad subgen. *Amphisphaerellam* pertinet et *R. callimorphæ* accedit.

35. **Rosellinia? glomerata** (Viala) Sacc. et Trav. — Syll. XX, p. 700 3680

— *Dematophora glomerata* Viala, Mal. de la Vigne, pag. 301-307, cum iconibus. — Mycelio brunneo irregulariter ramoso, flexuoso, filiformi, 2 μ . cr.; sclerotis e mycelio oriundis, globulosis v. oblongis nigris, minutissimis, 25-35 μ . diam., duris; pycnidioris (synnematibus ex eodem mycelio ortis (*Stysanus glomeratus* Sacc.) filiformibus, 3-8-fasciculatis, 1,5-2,3 mm. longis, nigris, rigidulis, rectis, ex hyphis angustissimis septatis, brunneis dense coalitis formatis, parte fertili fusoideo-cylindrica indivisa rarius ramulosa, brunneola (typiformi!), ramulis ultimis conidigeris ob-

clavatis; conidiis ovoideis crassiuscule tunicatis, 5,5 ~ 4, dilutissime fuscellis; peritheciis . . . ignotis.

Hab. in radicibus basique trunci *Vitis viniferae*, præsertim Héault, Landes, Vaucluse Galliae. — *Ros. necatrixi* affinis sed panicula conidiophora non alba, conidiis majoribus etc. dignoscenda. Rarior, sed æque necatrix.

- 36 *Rosellinia* spec. Roll. in Bull. Soc. myc. Fr. (1905) p. 23, *Sphaeria* 3631
Wolffensteniana Kühn (certe inedita).

Hab. in radicibus *Citri Aurantii*, cui valde noxia, in insulis Balearibus et Valentiae Hispaniae (OTTO WOLFFENSTENI, Inst. agronom. valentini director). — Fere absque dubio est *Rosellinia necatrix* v. ejus forma.

HELMINTHOSPHÆRIA Fuck — Syll. I p. 230.

1. *Helminthosphæria Odontiæ* v. Höhnel, Fragm. z. Mykol. III, Sitzb. d. Ak. d. Wissensch. Wien, Bd. CXVI, Abt. I (1907) p. 108. — Peritheciis innatis dein erumpenti-superficialibus, dense gregariis, membranaceo-carbonaceis, nigris, globosis, distincte papillatis, 210-250 µ. diam., superne calvis, ceterum setis atris v. atro-violaceo-brunneis, crebriusculis, continuis, 50 ~ 3-4 vestitis; contextu indistincte celluloso; ascis parcissime paraphysatis, cylindraceis, 70 ~ 7-8, octosporis; sporidiis monostichis, continuis, atro-cyaneis, diaphanis, 2-guttatis, oblongo-ellipsoideis, pro more rectis, non compressis, 6-9,5 ~ 3,5-4.

Hab. in hymenio *Odontiæ cristulatae*, parasitice, ad truncum fagineum pr. Pressbaum, Wienerwald Austriae.

2. *Helminthosphæria Corticorum* v. Höhnel, Fragm. z. Myk. III, Sitzb. d. Ak. d. Wissensch. Wien. Bd. CXVI, Abt. I (1907) p. 109. — Peritheciis gregariis, nigris, membranaceo-carbonaceis, asperulis, initio innatis, dein semiemergentibus, globoso-ovoideis, 500 ~ 300 basi hyphis parcis 4-5 µ. cr. brunneis præditis, sursum, præcipue circa ostium, setulis 60 ~ 6-7, obtusis, crasse tunicatis, griseo-brunneis, plus minus copiosis vestitis; ascis filiformi-paraphysatis, cylindraceis, 110-120 ~ 7, octosporis; sporidiis ellipsoideo-fusoideis, utrinque obtusulis, continuis, 1- dein 2-4-guttatis, monostichis, fumoso-brunneolis, diaphanis, 13-16 ~ 5-6.

Hab. parasitice in hymenio *Peniophoræ cremæ* ad Danubium pr. Tulln Austriae. — Sporidia extra ascum rarius bilocularia fiunt.

CHÆTOMIUM Kunze — Syll. I p. 220, IX p. 484, XI p. 279, XIV p. 490, XVI p. 428, XVII p. 600. — Cl. G. BAINIER in Bull. Soc. myc. Fr. (1909) pp. 191-231, multas species novas *Chætomii* exhibet sine diagnosi systematica sed earum conspectum synopticum affert, quem studiosorum commodo hic referimus. Species non-nullæ jam editæ interjectæ sunt.

I. Setæ peritheciæ non ramosæ nec anastomoticae.

A. Setæ rectæ v. undulatæ, non apice circinatæ.

† Setæ non furcatæ.

a. Setæ fere rectilineæ.

Ch. affine

b. Setæ distincte undulatæ.

Ch. Kunzeanum

†† Setæ furcatæ.

Ch. megalocarpum

B. Setæ sursum circinatæ.

Ch. murorum

C. Setæ spirales.

† Sporidia majuscula fusoidea.

a. Setæ omnes spirales.

Ch. spirilliferum

b. Setæ biformes.

§ Ostioli setæ paræ.

Ch. contortum

§§ Setæ copiosissimæ.

α Setæ in spiram longam æquicrassam convolutæ.

Ch. spirale

β Setæ in spiram sursum sensim tenuatam convolutæ.

Ch. undulatum

γ Setæ in spiram irregularem apice cuspidatam convolutæ.

Ch. setosum

†† Sporidia minora subsphæroidea.

a. Setæ echinulatæ v. longe cuspidatæ.

Ch. bostrychodes

b. Setæ leves non cuspidatæ.

Ch. comosum

D. Setæ crispatae.

† Setæ in area nigra sup. peritheciæ tantum insertæ.

Ch. glabrum

†† Setæ ostioli crispaæ et echinulatæ.

Ch. crispatum

††† Setæ ostioli crispaæ, curvatae et granulosæ.

Ch. tortile

II. Setæ ramosæ, non anastomoticae.

A. Rami rari, interdum difficile percipiendi.

† Setæ in spiram confertam convolutæ.

Ch. formosum

†† Setæ in spiram laxam æqualem convolutæ, perithecia ovoidea var. ovatum

††† Setæ in spiram laxam sursum tenuatam convolutæ.

var. neglectum

B. Rami copiosi, vere manifesti.

† Setæ rectæ plus v. minus regulariter dichotomæ.

a. Perithecia et sporidia minuta.	Ch. indicum
b. Perithecia et sporidia majuscula.	Ch. elatum
†† Setæ in dichotomias plerumque unilaterales.	Ch. chartarum
††† Setæ et ramuli spiraliter convoluti.	Ch. caprinum
†††† Setæ irregulariter ramosæ et torulosæ.	Ch. torulosum

III. Setæ ramosæ et anastomoticae.

A. Setæ polymorphæ, majores pleræque anastomoticae.	Ch. Cuniculorum
B. Setæ polymorphæ, crassiores longiores simplices, tenuiores ramosæ et anastomoticae.	C. rigidulum

1. **Chætomium megalocarpum** Bain. Bull. Soc. Mycol. Fr. XXV (1909) 3684
p. 202, t. 16, f. 1-4. — Perithecia varia, majora, 280 ~ 196; setulæ prælongæ 2,8 µ. cr., simplices v. furcatæ fuliginea; asci clavati, breviter stipitati, octospori; sporidia majuscula, nunc irregulariter sphæroidea, 14-16 µ. diam., nunc ovoidea 14-16 ~ 10.

Hab. in charta emporetica putrescente in Gallia. — Var. **chlorinum** Bain., l. c. toto fungo viridi-chlorino. In petiolis et caule putri Eryngii in Gallia.

2. **Chætomium spirilliferum** Bain., Bull. Soc. Mycol. Fr. XXV (1909) 3685
p. 207, t. 17, f. 1-4. — Perithecia globulosa, 525 µ. diam., e griseo nigricantia; setulæ 2,8 µ. cr., in spiram 22 µ. latam convolutæ; asci clavati; octospori; sporidia oliviformia, 16-17 ~ 8,4 flavo-viridula.

Hab. in excrementu Arietum in Gallia.

3. **Chætomium contortum** Bain., Bull. Soc. Mycol. Franc. XXV (1909) 3686
p. 205, t. 13, f. 5-6. — Perithecia sphæroideo-ovoidea, 300 ~ 252, initio cyanescentia dein nigricantia; setulæ 4 µ. diam., sursum in spiram 56 µ. latam convolutæ; asci clavati, octospori; sporidia fusoidea, 14 ~ 9, ex olivaceo brunnea.

Hab. in escrementis Arietum et aliorum animalium in Gallia.

4. **Chætomium undulatum** Bain., Bull. Soc. Mycol. Fr. XXV (1909) 3687
pag. 208, t. 14, f. 4-7. — Perithecia globulosa v. ovoidea, 252 ~ 224; setulæ 4 µ. cr., undulatæ; asci oblongo-clavati, octospori; sporidia fusoidea, 14-15 ~ 8, e latere 6 µ. cr., brunneola.

Hab. in frustulis ligneis terra infossis in Gallia.

5. **Chætomium setosum** Bain., Bull. Soc. Mycol. Franc. XXV (1909) 3688
p. 209, t. 18, f. 3-7. — Perithecia subsphærica, 280 ~ 252; setulæ basi 4 µ. cr., biformes; spira 25 µ. cr.; asci clavati, octospori;

sporidia subsphærica, 8-10 μ . diam., utrinque minutissime apiculata.

Hab. in palea uda in Gallia.

6. **Chætomium comosum** Bain., Bull. Soc. Mycol. Franc. XXV (1909) 3689
pag. 211, t. 17, f. 5-8. — Perithecia initio cyanescentia, ovoidea,
200 \times 160; setulæ 240-280 μ . long. in spiram 16-20 μ . latam con-
volutæ; asci clavati, octospori; sporidia sphæroidea, cyanescentia
4-6 μ ., diam., subinde versiformia.

Hab. in fimo equino in Gallia.

7. **Chætomium tortile** Bain., Bull. Soc. Mycol. France, XXV (1909) 3690
p. 214, t. 22. — Perithecia subsphaerica 370 μ . diam., virentia;
setulæ biformes, 5,6 μ . diam.; asci cylindracei octospori; sporidia
nunc sphæroidea 8 μ . diam., nunc ovoidea 8 \times 6, monosticha

Hab. in Gallia (matrice non indicata).

8. **Chætomium glabrum** Bain., Bull. Soc. Mycol. France XXV (1909) 3691
pag. 214, t. 21, f. 1-4. — Perithecia deorsum ad $\frac{2}{3}$ v. $\frac{3}{4}$ glabra,
367 μ . diam., superne nigricantia, deorsum subicoloria; asci cy-
lindracei, octospori; sporidia e sphærico ovoidea, 10 \times 8, e latere
6,5 μ . lat., brunneola.

Hab. in excremente canino in Gallia.

9. **Chætomium formosum** Bain., Bull. Soc. Mycol. Fr. XXV (1909) 3692
pag. 215, t. 20, f. 6-9. — Perithecia 294 μ . alta, 196 (basi) lat.;
setulæ 3,5 μ . crassæ, in spiram basi 42, supra 25 μ . diam. convo-
lutæ; asci clavati, octospori; sporidia subsphærica, 4-6 μ . diam.,
utrinque minutissime apiculata, griseo-cyanescentia.

Hab. in fimo Arietum in Gallia. — Var. **ovatum** Bain., l. c.
p. 216, t. 20, f. 1-5. — Dignoscitur peritheciis ovoideis, 490 \times 260;
sporidia sphærica et subinde ovoidea, cyanescentia, 6 \times 4-5,6. —
In Gallia (matrice non indicata). — Var. **neglectum** Bain. l. c. —
Imprimis setularum spira sursum sensim tenuata, non æquali
dignoscendum. — In Gallia (matrice non indicata).

10. **Chætomium caprinum** Bain., Bull. Soc. Mycol. Fr. XXV (1909) 3693
p. 223, t. 14, f. 1-3. — Perithecia ovoideo-piriformia, 525 \times 225,
translucida; setulæ 180 \times 3, longiores 275 μ . long.; asci ovoidei,
octospori; sporidia subsphærica, 7 μ . diam., dilute olivacea, e la-
tere compresso-fusoidea, 7 \times 5,6.

Hab. in exrementis Caprarum in Gallia.

11. **Chætomium torulosum** Bain., Bull. Soc. Mycol. France, XXV 3694
(1909) p. 224, t. 23. — Perithecia flavo-ochracea, 294 \times 148; se-
tulæ 285 μ . long.; sporidia 8 \times 6, olivaceo-fuliginea.

Hab. in Gallia (matrice non indicata).

12. **Chætomium rigidulum** Bain., Bull. Soc. Mycol. Fr., XXV (1909) 3695 p. 228, t. 26. — Perithecia 300 μ . diam.; setulae maiores 300-400 \times 6; asci clavati, octospori; sporidia 8 \times 6, utrinque subapiculata.

Hab. in exrementis Cuniculorum in silvis, in Gallia.

13. **Chætomium Oospora** Beauverie, Etud. polymorph. pag. 215-218 3696 et fig. 65-69 (sine diagnosi). — Peritheciis globosis, verruculosis, setosis, setulis in medietate sup. perithecii prælongis, erectis, tortuosis, perithecii diametro sesquilongioribus, inferioribus multo brevioribus divergentibus vix flexis, basilaribus repentibus; ascis clavatis longiuscule sensim stipitatis, octosporis, apice rotundatis; sporidiis distichis, ovoideis, 24-25 \times 14-16 (ex icono), coloratis.

Hab. in Gallia in culturis Oosporæ crustaceæ, quacum vivit, et cujus, teste Beauverie, esset status ascophorus.

14. **Chætomium spirochæte** Palliser in North Am. Fl. III, pt. 1 (1910) 3697 p. 61. — Peritheciis plus minus dense gregariis, late ellipsoideis, 300 \times 225, tenuivus, fragilibus, atro-brunneis, sæpe nigris, dense piligeris; pilis basalibus et lateralibus remote septatis, levibus, brunneis, flexuosis, 3 μ . cr., apicalibus numerosis, sæpe massam dense intricatam sphæroideam, 800 μ . diam., formantibus, rectis usque ad 350 μ ., supra maxime flexuosis v. irregulariter plures spiraliter tortis; atro-brunneis, basi 4-5 μ . cr., plus v. minus crasse incrustatis, apicem versus pallidioribus; ascis . . .; sporidiis e subhyalino brunneis, late ovoideis, utrinque leviter apiculatis, 7-11 \times 6-9.

Hab. in charta uda putrescente, Ames Iowa Amer. bor. (L. H. PAMMEL).

15. **Chætomium flexuosum** Palliser, in North Amer. Fl. III, pt. 1 3698 (1910) p. 61. — Peritheciis sparsis v. gregariis, late ellipsoideis v. ovoideis, 300-400 \times 225-350, tenui-membranaceis, atro-brunneis v. nigris, ubique piligeris; pilis basalibus et lateralibus longis, tenuibus, flexuosis, pallide brunneis, apicalibus parciорibus, 500 \times 4-6, sursum sensim tenuatis, remote septatis, atro-brunneis, supra pallidioribus, asperulis, rectis, prope apicem vero semel v. bis laxe spiraliter convolutis; ascis . . .; sporidiis brunneis late ovoideis v. subglobosis, utrinque subapiculatis, 9-11 \times 7-9.

Hab. in cistis vetustis, lignis et fructibus Hordei putrescentibus, New York, Michigan etc. Amer. bor.

16. **Chætomium aiterrimum** Ell. et Ev., in Palliser North Am. Flora, 3699

III, pt. 1 (1910) p. 62. — Peritheciis sparsis, laxe adhærentibus, nigris, ovoideis v. subglobosis, 275 μ . alt., apice perforatis, tenui-membranaceis, dense piligeris; pilis basalibus et lateralibus numerosis, levibus v. leviter incrusted, flexuosis, late brunneis, septatis, fragilibus; pilis apicalibus atro-brunneis, crasse incrusted, basi 6 μ . cr. apice 10-12 μ . cr., usque ad 120-180 μ . rectis, sursum in spiram regularem, 400-500 μ . long. et 50-60 μ . diam., de cies v. duodecies convolutis; ascis . . . ; sporidiis ellipsoideis, utrinque leviter apiculatis, flavo-brunneis, 6-7,5 \times 4-5.

Hab. in caryopsidibus Tritici putrescentibus, Rockport Kansas (E. BARTHOLOMEW).

17. **Chætomium cochloides** Palliser, in North Am. Fl. III, pt. 1 3700 (1910) p. 61. — Peritheciis sparsis v. gregariis, late ovoideis vel globosis, 300-400 μ . diam., tenui-membranaceis, atro-brunneis, dense piligeris; pilis lateralibus et basalibus pallide brunneis, septatis, vix 4 μ . cr., sursum attenuatis, pilis apicalibus valde flexuosis a basi ipsa, sursum inæqualiter spiraliter curvis, levibus v. raro basi asperulis, copiosis, massam intricatam usque ad 700 μ . supra perithecium expansam formantibus; ascis . . . ; sporidiis e subhyalino pallide brunneis late ovoideis v. subglobosis, subinde polis subapiculatis, 9-11 \times 8-10.

Hab. in charta, fæno, cistis, storeis putrescentibus, udis, New Jersey, Louisiana etc. Amer. bor.

18. **Chætomium Elasticæ** Koord., Botan. Untersuch. (1907) pag. 185, 3701 fig. 16 I. — Peritheciis superficialibus, coriaceis, atris, ovoideis, papillato-ostiolatis, dense et longe villosis, $1\frac{1}{4}$ - $1\frac{1}{3}$ mm. diam., sparsis v. gregariis, pilis 350-450 \times 3; ascis clavatis, apice rotundatis et haud incassatis, 8-sporis, 45-50 \times 15-18, a paraphysatis; sporidiis continuis, fumigatis, ellipsoideis v. subglobosis, utrinque rotundatis v. obtusis v. subacutis, 10-12 \times 6-10.

Hab. in foliis putrescentibus ex Java, Martio 1907 (KOORDERS).

— *Chætomio Kunzeano* Zopf proximum.

19. **Chætomium papillosum** Cocconi, Mem. Ac. Sc. Bologna, ser. V, 3702 t. VIII (1902) p. 683, cum tabula. — Peritheciis laxe gregariis, minutis, subglobosis, superficialibus, vertice obtuso poro apertis, hyphis mycelicis radiantibus, pallidis, exilibus basi cinetis, superne vero setulis fuligineis, patenter radiantibus, filiformibus, simplicibus, apice exquisite hamatis, laxiusculis peritheci diametrum superantibus ornatis; ascis crasse cylindraceis, apice rotundatis, breviter tenuato-stipitatis, octosporis, a paraphysatis; sporidiis monostichis,

ovoideis, levibus, hyalinis, basi v. apice papilla conoidea, brevi, equidem hyalina auctis.

Hab. ad ligna putrida pr. Bononiam. — Teste auctore simul adsunt status conidiophorus (*Stachybotrys?*) et pycnidicus (*Diplodia*). Dimensiones omnes desiderantur! Ob sporidia hyalina vix hujus generis.

SORDARIA Ces. et De Not. — Syll. I p. 230, IX p. 487, XIV p. 492, XVI p. 430, XVII p. 601.

1. **Sordaria Lappæ** Potebnia, Myc. Stud. in Ann. Myc. V (1907) p. 13 3703 et Travaux Soc. Nat. de Kharkov, XXXXVIII (1907). — Peritheciis erumpentibus, piriformibus 450 \times 200, collo 120-150 \times 16; sporidiis ellipsoideis, nigris, 21 \times 14-15.

Hab. in caulis putrescentibus Lappæ majoris, socio *Helminthosporio brachyclado*, in Rossia media.

2. **Sordaria hirsuta** (Dang.) Sacc. et Trav. Syll. XX, pag. 807, *Podospora hirsuta* Dangeard in Botaniste X (1907) pag. 345, t. 81 (sine diagnosi). — Peritheciis semiimmersis, globoso-conoideis, brunneo-nigricantibus, collo longiusculo saepe curvulo præditis, mycelio albo v. brunneo perithecia investiente et connectente, hyphis septatis, crassiusculæ tunicatis; sporidiis initio cylindraceis hyalinis 15 \times 2-3, dein ellipsoideis atro-brunneis 25-30 \times 14, cauda hyalina 20 longa auctis.

Hab. in excrementis? ... sed culta tantum observata, in Gallia. — Præcipue indumento copioso albo-brunneo dignoscenda videtur.

HYPOCOPRA Fuck. — Syll. I p. 240, IX p. 490, XI p. 279, XVI p. 433, XVII p. 605.

1. **Hypocopra fimicola** (Rob.) Sacc. — Syll. I, p. 240. — var. *felina* 3705 Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 341. — A typo vix recedit partibus omnibus paululo majoribus; peritheciis 250 p. diam.; ascis 200 \times 20; sporidiis 22-24 \times 14-16.

Hab. ad sterco felini putrescens, La Plata, Rep. Argentina Amer. austr.

2. **Hypocopra capturæ** (Spieg.) Sacc. — Syll. I, p. 242. — var. *disco-papillata* Starb., in Arkiv för Bot. V (1905) pag. 15 (extr.). — A typo differt: ascis 200-250 \times 19-21, sporidiis 25-30 \times 12-14 nec non peritheciis late ostiolatis, ostiolo disciformi centro pertuso supra matricem elevato.

Hab. in fimo ovino, prov. Salta Argentinæ.

CAPROLEPA Fuck. — Syll. I p. 248, IX p. 493, XVI p. 434, XVII p. 608.

1. **Caprolepa equorum** Fuck. — Syll. I, pag. 249. — var. *leporina* 3707 Niessl ap. Rehm, Hedw. XXVIII (1889) p. 356. (*Hypocopra*). — Peritheciis glabris, basi hyphis brunneis, 2,5 μ . cr., septatis cinetis; ascis 180 \approx 12-14, apice incrassatis rotundatisque, octosporis; sporidiis ellipsoideis, obtusis, crasse tunicatis, atro-brunneis, 18-24 \approx 7-8, monostichis; paraphysibus filiformibus, 3 μ . cr.

Hab. in fimo leporino in silvis pr. Ratschitz Moraviæ. — Inter *C. equorum* et *C. merdarium* media.

PHÆOBOTRYOSPHÆRIA Speg., Ann. Mus. Nac. Buenos Aires t. XVII (1908) p. 120 (Etym. *phæos* fuscus et *Botryosphæria*). — Stromata pulvinata v. plus minus evoluta, erumpenti-superficialia; perithecia stromate inserta et plus minus infossa, atra, subcoriacea. Sporidia elliptico-rhomboidea, continua, fuliginea, octona.

1. **Phæobotryosphæria** Verba Speg., l. c. p. 120, cum ieon. — Peritheciis subsparsis v. aggregatis et stromate plus v. minus evoluto connessis, globoso-lenticularibus, papillato-ostiolatis, coriacellis, atris, albo-farctis, 200 μ . diam., contextu grosse et parum distincte parenchymatico, fuligineo; ascis clavatis, apice rotundatis, crassissimeque tunicatis, 150-180 \approx 30-35, paraphysibus nullis v. parcis et spuriis obvallatis, brevissime noduloso-pedicellatis; sporidiis distichis, ellipsoideis, saepius rhomboideo-navicularibus, utrinque obtusulis, 30-40 \approx 14-20, eguttulatis, opace fuligineis, levibus.

Hab. ad ramulos emortuos Ilicis paraguariensis (Mate), Misiones Argentiniæ.

Sect. 4. Hyalodidymæ.

SPHÆRELLA Ces. et De Not. (*) — Syll. I p. 476, IX p. 611, XI p. 295, XIV p. 525, XVI p. 468, XVII p. 635.

(*) De præferendo nomine *Sphaerella* loco *Mycosphaerella* oīr. quæ diximus in BRIQUET Rec. des docum. destinés à servir de base aux débats au Congr. internat. de Botan. de Bruxelles (1910) p. 46. Nempe: *Sphaerella* (Fr. 1849) Ces. et De Not. 1863 (species nunc ultra 700!) est nomen conservandum et e contra est rejicendum nomen *Mycosphaerella* Johans., 1884 ex parte [non *Mycosphaerella* Johans. emend. Sacc. 1891], nam gen. anterius *Sphaerella* Somm., 1824, constat ex unica specie valida, sed mox mortua, quæ jam ab anno 1828 *Haematococcus* audit.

1. **Sphaerella Alyssi** Hollós, Ann. Mus. Nat. Hungar. V (1907) p. 44. 3709
— Peritheciis gregariis, epidermide velatis, depresso-globosis, fuscis, punctiformibus, pertusis, 50-70 μ . diam., contextu parenchymatico; ascis ovoideis vel clavatis, breve stipitatis, octosporis, 24-30 \approx 9-10, aparaphysatis; sporidiis 2-3-stichis, oblongis, medio 1-septatis, non constrictis, hyalinis, 9-10 \approx 3-4.
Hab. in caulis siccis Alyssi tortuosi prope Kecskemét, Hungarie.
2. **Sphaerella persica** (Syd.) Sacc. et Trott., *Mycosphaerella persica* 3710 Syd., Ann. Mycol. VI (1908) p. 529. — Peritheciis sparsis v. irregulariter aggregatis, minutis, plerumque in partibus matricis cinnereo-tinctis sitis, epidermide tectis, globosis, atris, nitidis, poro rotundo usque ad 30 μ . lato apertis, 70-140 μ . diam., contextu parenchymatico, brunneo, circa porum obscuriore; ascis ovoideis v. subcylindraceis, breviter stipitatis, 45-70 \approx 17-25, octosporis; sporidiis distichis oblongis, medio 1-septatis, non constrictis, utrinque rotundatit, hyalinis, 14-21 \approx 6-7, cellula super. subinde paullo latiore.
Hab. in caulis emortuis Morieræ stenopteræ in Monte Kuh Parrau Persiae occid. (TH. STEAUSS).
3. **Sphaerella andina** Speg., An. Mus. Nac. Buenos Aires t. XIX 3711 (1909) pag. 350. — Maculis nullis; peritheciis laxe gregariis primum epidermide velatis dein plus minusve denudatis, udis subglobosis 90-120 μ . diam. minute papillato-ostiolatis, submembranaceis; ascis crasse cylindraceis, 70-80 \approx 20-24, aparaphysatis octosporis; sporidiis ex ellipsoideo subclavulatis rectis, 18-20 \approx 6, medio 1-septatis non v. vix constrictis, hyalinis (an postremo dilute fumosis?).
Hab. ad scapos aridos Thlaspeos andicolæ prope Lago Blanco, Patagonia Amer. austr. — Species cum *S. Cruciferarum* (Fr.) Sacc. non comparanda.
4. **Sphaerella Theobromæ** F. C. v. Faber in Arbeit. K. Biol. Anst. 3712 Berlin VII (1909) p. 219. — Maculis pallidissime brunneis v. flavidis, margine succineo dein atro-brunneo, elevato cinctis; peritheciis innatis, nigris, dein ostiolo brevi nigro præditis; ascis clavatis, 8-sporis; sporidiis fuscoideis, 17 μ . long., continuis visis sed forte immaturis.
Hab. in fructibus, Phytophthora infectis et necatis, Theobromæ Cacao, Camerun Afric. trop. Forte species damnosa.
5. **Sphaerella Boquilæ** Speg. Fungi Chilenses (1910) p. 53. — Macu-

lis nullis; peritheciis hypophyllis, sparsis v. laxe gregariis, lenticularibus, minutis nigris, epidermide tectis, 90-100 μ . diam.; ascis sublanceolatis, apice crasse tunicatis, basi brevissime pedicellatis, 40 \approx 12, sporidiis conglobatis, subclavulatis, non v. vix inæquilate-ralibus, non constrictis, parvis, hyalinis, 12-13 \approx 3.

Hab. in foliis siccis Boquilæ trifoliatæ in silvis prope Cerro Carracol de Concepcion, Chile Amer. austr.

6. **Sphærella Lardizabalæ** Speg., Fungi Chilenses (1910) pag. 55. — 3714
Maculis nullis; peritheciis laxe gregariis innato-erumpentibus, nigris coriaceis, ostiolo minuto pertusis, 75-90 μ . diam.; ascis lanceolatis brevissime pedicellatis, a paraphysatis; sporidiis subconglobatis subclavulatis, hyalinis, parvulis, distichis v. tristichis, 10-12 \approx 2,5-3.

Hab. in foliis dejectis subputrescentibus Lardizabalæ bibernatæ, Cerro Caracol de Concepcion, Chile Amer. austr.

7. **Sphærella rhoina** Sacc., Ann. Mycol. VI (1908) p. 561. — Macu. 3715
lis peculiaribus nullis, sed folio toto arescendo brunneo; peritheciis hinc inde densiuscule congregatis, punctiformibus, pere exiguis, plerumque hypophyllis, hemisphæricis, prominulis, nitidulis poro minuto pertusis, 70-80 μ . diam.; ascis cylindraceis, apice rotundatis, basi tenuato-subsessilibus, 30-36 \approx 5,5-6, octosporis, a paraphysatis, initio fasciculatis; sporidiis distichis tereti-fusoideis, utrinque obtusulis, 1-septatis, non v. vix constrictis, 7-8 \approx 2, hyalinis.

Hab. in foliis putrescentibus Rhois Toxicodendri, pr. Tamsel Germaniae (P. VOGEL).

8. **Sphærella maculiformis** (Pers.) Auersw. — Syll. I, p. 477, var. *Hippocastani* Jaap in Abhandl. Bot. Ver. Brandenb. LIII (1910) p. 141. — Præcipue dignoscitur sporidiis majoribus 12-17 \approx 3-3,5, tereti-clavulatis, supra medium septatis, distichis, ascis cylindraceis 40 \approx 7.

Hab. in foliis Aesculi Hippocastani pr. Triglitz Borussiae. — *Septoria Aesculi* videtur ex auctore status pycnidicus.

9. **Sphærella Violæ** (A. Pot.) Sacc. et Trav., Syll. XX p. 829, *Myco-sphærella Violæ* A. Potebnia, Ann. mycol. (1910) p. 51, f. 5:3. — Peritheciis 150-170 μ . diam., subimmersis, ostiolo verruciformi præditis; ascis 60-85 \approx 18-20; sporidiis 21 \approx 5-6, cylindraceis, medio septatis.

Hab. in foliis hibernantibus Violæ hirtæ, Gouv. Kursk Rossia. — Huc pertinent verisimiliter, ut formæ metageneticæ: *Cercospora Violæ*, *Ramularia lactea*, *Septoria Violæ*.

10. *Sphaerella silenicola* Hollós, Ann. Mus. Nat. Hungar. VII (1909) 3718

p. 51. — Peritheciis epidermide tectis, sparsis, sphaeroideis, nigris, breve papillatis, 140-180 μ . diam., contextu celluloso; ascis fasciculatis, clavatis, estipitatis, vertice rotundatis et crasse tunicatis, 8-sporis, 48-60 \times 18-22, a paraphysatis; sporidiis 2-3-stichis, oblongo-ellipsoideis, medio 1-septatis non constrictis, 2-4 guttulatis, 20-22 \times 6-7.

Hab. in caulis siccis *Silenes Otitis* prope Kecskemét Hungariae.

11. *Sphaerella gypsophilicola* Hollós, Ann. Mus. Nat. Hungar. V 3719 (1907) p. 44. — Peritheciis dense gregariis, epidermide velatis,

globulosis, prominulis, nigris, punctiformibus, pertusis, 100-120 μ . diam., contextu parenchymatico; ascis ovoideis v. oblongis, sessilibus, octosporis, 36-40 \times 12-14, a paraphysatis; sporidiis oblongo-ellipsoideis, rectis curvulis, medio 1-septatis, non constrictis, 4-guttulatis, hyalinis, 16-18 \times 4-5.

Hab. in caulis siccis *Gypsophilæ paniculatae* prope Kecskemét Hungariae.

12. *Sphaerella arenariicola* (Bubak) Sacc. et Trott., *Mycosphaerella* 3720

arenariicola Bub. in Handel-Mazzetti, Bot. Reise Pont. Randgeb. in Ann. Naturhist. Hofmus. Wien XXIII (1909) p. 103. — Peritheciis hypophyllis, rarius epiphyllis, fere aequaliter sparsis, parum immersis, basi globosis, parte libera conica, aterrimeis, opacis, contextu nigro-brunneo, 80-120 μ . latis; ascis oblongis 30-45 \times 9-11, saepe curvatis, crasse tunicatis, breve stipitatis, a paraphysatis, octosporis; sporidiis fusoides 9-11 \times 2,5-3,5, in medio uniseptatis, utrinque attenuatis et rotundatis, hyalinis.

Hab. in foliis *Arenarie rotundifoliae*, in montibus ponticis Anatolie. — *Sph. Pulvisculæ proxima*.

13. *Sphaerella Silenes-acaulis* Maire, Oesterr. Bot. Ztschr., LVII 3721 (1907) p. 335. — Peritheciis sparsis v. gregariis, primo immersis,

dein erumpentibus, globosis, 130-180 μ . diam.. nigris, levibus, ostio minuto vix papillato pertusis; ascis sessilibus, oblongo-cylindraceis, 35-43 \times 12-13, octosporis; sporidiis distichis, fusoides, utrinque obtusis, medio septatis, non constrictis, levibus, hyalinis, 9-13 \times 2,5; paraphysibus nullis.

Hab. in pedunculis, calycibus, foliisque exsiccatis *Silenes acaulis*, Hühnerspiel Tirolie, alt. 2300 m. — Affinis *Sph. sibiricæ* et *S. subnivali*.

14. *Sphaerella citrullina* C. O. Smith, Delaw. Exper. Stat. Bull. 70 3722

(1905), *Mycosphaerella citrullina* (C. O. Sm.) Grossenbacher, Techn. Bull. N. York Agric. Exp. Station n. 9 (1909) p. 226, t. I-VI.
 — Peritheciis globoso-depressis v. obconoideis, atro-brunneis vel nigris; rugulosis, pro more ostiolato-papillatis, simplicibus, dense sparsis, erumpentibus, denique subsuperficialibus, 100-165 μ . diam.; ascis cylindraceis v. tereti-clavatis, apophysatis, subsessilibus, 45-58 \times 7-10; sporidiis plerumque monostichis, bicellularibus, hyalinis, oblongo-fusoideis, vel fusoideis, modo non constrictis, modo cellulis, præcipue superiore, tumidulis et tunc constrictis, 10-12 \times 3,5-4.

Hab. in caulinis Cucumeris Melonis, C. sativi et probabiliter Citrulli vulgaris, quibus valde nocet in America boreali et in Italia (TURCONI). — Status pycnidicus est *Diplodina citrullina*. — Fusorem notitiam de specie et ejus synonymia videoas apud Grossenbacher l. c.

15. **Sphaerella Tamaricis** Hollós, Ann. Mus. Nat. Hung. IV (1906) 3723 p. 332. — Peritheciis epidermide tectis, gregariis, depresso-globosis, nigris, apice pertusis, 140-180 μ . diam.; ascis clavatis, estipitatis, 8-sporis, 70-80 \times 16-18 apophysatis; sporidiis oblique monostichis v. inordinate distichis, oblongis, medio 1-septatis, constrictis, utrinque rotundatis, initio hyalinis, dein flavidulis, 20-22 \times 10-12, loculo superiore plerumque paullo crassiore.

Hab. in ramulis siccis Tamaricis africanæ, Kecskemét Hungariae.

16. **Sphaerella viticola** Hollós, Ann. Mus. Nat. Hung. V (1907) p. 454. 3724 — Peritheciis subcutaneo-erumpentibus, gregariis v. sparsis, globulosis, nigris, 140-210 μ . diam., ostiolo punctiformi, contextu parenchymatico; ascis clavatis, breviter stipitatis, 6-8-sporis, 80-90 \times 18-24, apophysatis; sporidiis inordinate distichis, oblongis, utrinque rotundatis, medio 1-septatis, leviter constrictis, initio hyalinis, dein flavidulis, pluriguttulatis, 26-28 \times 9-10 loculo superiore, paullo crassiore.

Hab. in sarmenis semivivis Vitis viniferæ prope Kecskemét Hungariae. — A ceteris speciebus *Sphaerellæ* in Vite vi gentibus satis distincta.

17. **Sphaerella Vogelii** Syd., Mycoth. germ. fasc. XIV-XV, n. 681 3725 (1908) et in Ann. Mycol. VI (1908) p. 480. — Peritheciis hypophyllis, dense sparsis v. gregariis, immersis, atris, membranaceis, subglobosis, 60-125 μ . diam.; ascis fasciculatis, apophysatis, clavatis, sessilibus vel brevissime stipitatis, apice rotundatis, 42-50 \times

9-11, octosporis; sporidiis distichis, oblongo-fusoideis, circa medium septatis, subinde loculo superiore latiore sed breviore, tandem constrictis, hyalinis, 15-22 \times 3-4 $\frac{1}{2}$.

Hab. in foliis putrescentibus *Rhamni Catharticæ*, Tam-sel, Marchia Brandenburg (P. VOGEL).

18. *Sphaerella asunciensis* (Starb.) Sacc. et Trott., *Mycosphaerella a. 3726 sunciensis* Starb. Ascomyc. Schwed. Chaco-Cordill. Exp., Arkiv. f. Bot. Bd. V (1905) pag. 21, fig. 15. — Peritheciis epiphyllis epi-dermidem utriusque paginæ paullum pustulatim elevantibus, ostio-lis rimosim prominentibus, aggregatis et maculas orbiculares vel varie determinatas, 2-3 mm. diam., obscuriores efformantibus, mi-nutissimis, circa 150 μ . diam.; ascis aparaphysatis, cylindraceis v. cylindraceo-obclavatis, vel fusiformibus, sessilibus, sursum incras-satis, 100-127 \times 12,7-15; sporidiis octonis, irregulariter monostichis vel nonnullis distichis, interdum inferioribus congregatis, clavula-tis, sursum obtusis, deorsum anguste v. fere caudatim attenuatis, cauda interdum paullum curvata, medio-septatis, endoplasmate grumoso vel guttulis quatuor ornatis, hyalinis, 29-33 \times 6-7.

Hab. in foliis vivis *Trichilia* sp. villa Morro, Asuncion, Paraguay (MALME). — Pycnidia peritheciis similia adsunt: sporulis numerosissimis, bacillaribus, hyalinis, 6-8 \times 1-2 μ . e basidiis fili-formibus 19-25 \times 1-2 orientibus. — Inter Sphaerellas sporidiis majoribus *S. elatiori* Sacc. affinis, maculis autem et peritheciis parasitantibus nec non sporidiis valde differt.

19. *Sphaerella Molleriana* Thüm. - Syll. I, p. 491 — var. *megalospora* 3727 Da Camara, Bol. Soc. Broteriana, XXV (1910) Extr. pag. 7. — Peritheciis saepe sparsis, haud vel in macula fere nulla dispositis; ascis late obclavatis, hyalinis, subsessilibus, octosporis, 50-60 \times 18-20; sporidiis di-tristichis, claviformibus, hyalinis, medio septatis, non v. vix constrictis, utrinque guttulatis, 20-25 \times 6-8.

Hab. in foliis *Eucalypti* sp., prope Coimbra, Cerca de S. Bento, Lusitaniae (A. MOLLER).

20. *Sphaerella conspicua* Syd., Ann. Mycol. V (1907) pag. 356. — 3728 Maculis amphigenis, valde conspicuis, orbicularibus vel suborbicu-laribus, confluendo saepe irregularibus, $\frac{1}{2}$ -1 cm. diam., bene limi-tatis, fusco-brunneis; peritheciis amphigenis plerumque dense ag-gregatis, punctiformibus, tenui-membranaceis, immersis, atris, glo-bulosis, poro pertusis, 70-110 μ . diam.; ascis fasciculatis, clavatis, apice rotundatis, non incrassatis, basi attenuatis, aparaphysatis, 50-72 \times 11-14, octosporis; sporidiis distichis, elongatis, utrinque

obtusiusculis, rectis v. leniter curvulis, medio 1-septatis, non constrictis, hyalinis vel chlorino-hyalinis, 24-28 \approx 3-3 $\frac{1}{2}$.

Hab. in foliis Myrsines spec., prov. Minas Geraes, Confins, Brasilia.

21. *Sphaerella antivarensis* Bubák, Bull. Herbier. Boiss. 2 sér. VI 3729 (1906) p. 399. — Peritheciis sparsis v. hinc unde aggregatis, basi tantum insculptis, subsuperficialibus, globoso-depressis, nigris, 130-160 μ . diam., contextu atro-brunneo, inferne vere subhyalino; ascis ovoideo-clavatis, breviter stipitatis, 30-35 \approx 11-15, a paraphysatis; sporidiis oblongis, 11-13 \approx 4-4,5, hyalinis, bicellularibus, cellula superiore latiore.

Hab. in ramulis adhuc vivis Myrti communis pr. Bar, Antivari, Montenegro.

22. *Sphaerella Tormentillæ* (Sacc.) Trav. MS. — *Sph. Ariadna*, subsp. 3730 *Tormentillæ* (Sacc.) in Mich. I, p. 379 (1878). — Syll. I, p. 504. — Maculis irregulariter ellipsoideis, parvis, 2-3 mm. longis, pallide isabellinis, arescendo albicantibus, rufo-cinctis; peritheciis in quaque macula paucis, innato-erumpentibus, globoso-depressis, nigris, 50-60 μ . latis, poro angusto circulari pertusis; ascis late obovatis, basi acutatis, 22-25 \approx 14-15; sporidiis imbricato-subtristis, cylindraceo-fusoideis, utrinque obtusis, modice sed distincte curvulis, medio tenuiter septatis et parum constrictis, minute 4-guttulatis, hyalinis, 8-10 \approx 2 $\frac{1}{2}$ -3.

Hab. in foliis languidis *Tormentillæ erectæ*, in silva «Montello», Treviso, Ital. bor. — Affinis *Sph. Ariadna* Sacc. sed sporidiis minoribus et præcipue matrice aliena distinguenda species.

23. *Sphaerella Cydoniæ* Vogl., Ann. R. Acc. Agric. Torino XLVIII, 3731 1905, p. 16 (extr.); Atti R. Acc. Sc. Torino v. XLIII (1907-1908) p. 92 (246). — Maculis exaridis 2-5 mm. latis, subrotundis, epiphyllis, rarissime hypophyllis; peritheciis nigris (6-8-10), sparsis v. gregariis, immersis, inde epidermidem perforantibus, prominulis, sphæroideis, plus vel minus conoideo-attenuatis, ostiolo lato hiantibus, 100-120 μ . latis; ascis oblongo-v. ovoideo-clavatis, brevissime pedicellatis, medio irregulariter incrassatis, 60-70 \approx 12-14; ascosporis ovoideo-ellipsoideis, v. fusoideis, leniter incurvatis, raro ad sepimentum leniter constrictis, loculis subæqualibus, chlorino-hyalinis, 20-22 (raro 20-26) \approx 5-7 (raro usque ad 8 μ .), 4-guttulatis.

Hab. in foliis siccis *Cydoniæ vulgaris* in Pedemontio Italizæ bor.

24. *Sphærella valeppensis* (Rehm) Sacc. et Trott., *Mycosphaerella va-* 3732
leppensis Rehm, Oesterr. bot. Ztschr. LVI (1906) pag. 295. —
 (Nomen nudum).

Hab. in foliis Dryadis octopetalæ in Valepp, Bavaria.

25. *Sphærella Acenæ* P. Henn., Deutsche Südpolar-Exped. VIII (1906) 3733
 p. 9 (extr.). — Maculis irregularibus sparsis, fuscidulis; peritheciis epiphyllis innato-erumpentibus, sparsis vel gregariis, subglobosis v. lenticularibus, atro-fuscis, membranaceis, poro pertusis, 60-80 μ . diam.; ascis fasciculatis, clavatis, apice rorundatis, tunicatis, a paraphysatis, octosporis, 30-40 \times 8-10; sporidiis ellipsoideis v. subclavatis, obtusis, medio 1-septatis, hyalinis, subdistichis, 7-8 \times 3,5-4.

Hab. in foliis vivis Acenæ ascendantis, Kerguelen-Station in ins. Kerguelen (E. WERTH).

26. *Sphærella Oxyacanthæ* (Jaap) Sacc. et Trott., *Mycosphaerella O-* 3734
xyacanthæ Jaap, Abh. Botan. Ver. Prov. Brandenb. IL (1907)
 p. 15. — Peritheciis hypophyllis, gregariis laxiusculis, innatis, dein ostiolo erumpentibus, prominulis, globulosis, 100-140 μ . diam.; ascis tereti-fusoideis, sursum tenuato-rotundatis, fasciculatis, a paraphysatis 50-60 \times 9-12 (sæpius 10), octosporis, pedicello vix 4-5 μ . longo; sporidiis distichis, tereti-fusoideis v. clavulatis, leviter curvis, bicellularibus, 20-24 \times 4-5, eguttulatis, articulo super. paullo crassiore es sæpe breviore.

Hab. in foliis Cratægi Oxyacanthæ, socio st. conid.

Phleospora Oxyacanthæ, pr. Triglitz Borussiæ.

27. *Sphærella Erythrinæ* (Koord.) Sacc. et Trav. - Syll. XX, p. 820, 3735
Mycosphaerella Erythrinæ Koord., Botan. Untersuch. (1907) p. 189,
 fig. 15 (7-14). — Peritheciis epiphyllis in maculis circularibus are-
 scendo albescensibus, sparsis, tectis, coriaceis, nigris, glabris, ostiolo papilliformi erumpente 50-60 μ . diam., ascis clavatis, apice valde incrassatis, fasciculatis, 8-sporis, 40-42 \times 10-12; sporidiis hyalinis,
 cylindraceis, rectis v. curvulis, initio continuis, dein medio 1-sep-
 tatis, utrinque rotundatis, 14-15 \times 3-3,5 sub 2-3-seriatis.

Hab. in foliis vivis Erythrinæ ovalifoliae. prope Sadang prov. Kedu, Java (KOORDERS).

28. *Spaærella Onobrychidis* Hollós, Növényt. Közlemén., VI (1907) 3736
 Extr. p. 2. — Peritheciis epidermide tectis, gregariis, depresso-
 globosis, nigris, apice pertusis, 100-160 μ . diam., contextu paren-
 chymatico; ascis clavatis, estipitatis, 6-8-sporis, 60-80 \times 20-24,
 a paraphysatis; sporidiis inordinate distichis, oblongis, medio 1

septatis, constrictis, utrinque rotundatis, pluriguttulatis, hyalinis, 22-24 \times 8-9, loculo superiore plerumque paullo crassiore.

Hab. in caulis siccis Onobrychidis sativæ, prope Kecskemét Hungariae.

29. *Sphærella Jaczewskii* (A. Pot.) Sacc. et Trav. - Syll. XX p. 822 3737

- *Mycosphaerella Jaczewskii* A. Potebnia, Ann. mycol. (1910) p. 50, f. 2 et f. 5:2. — Peritheciis amphigenis, ampulliformibus, sub-superficialibus, nigris, ostiolo subverruciformi, 120-140 \times 150-170; ascis cæspitosis, basi v. medio inflatis, 55-70 \times 12-14; sporidiis sine ordine distributis, hinc inde congregatis circiter 21-23 \times 5-6 sed ætate variabilibus, ad septum non constrictis, loculo inferiori paullo angustiori.

Hab. in foliis hibernantibus Caraganæ arborescentis a *Pleospora Caraganae* invasis, Gouv. Kursk, Rossia. — Perithecia ex sclerotio statui micropycnidico consociatis. Micropycnidii 70-100 μ . diam. sporulis bacillaribus 3 \times 0,5 (= *Phyllosticta Borszczowii* Thüm.?)

30. *Sphærella Lathyri* (A. Pot.) Sacc. et Trav. - Syll. XX, p. 823 - 3738

Mycosphaerella Lathyri A. Potebnia, Ann. mycol. (1910) p. 51 f. 4. — Peritheciis 140-160 \times 120-140, erumpenti-subsuperficialibus, globose-papillatis, ostiolo brevi verruciformi præditis et pertusis stromate rudimentali basi circumdatis; ascis clavatis breve stipitatis apice rotundatis, 60 \times 16; sporidiis hyalinis 16-17 \times 3,5, medio septatis, non constrictis, apice rotundatis, cellula sup. paullo latiori.

Hab. in foliis hibernatis Lathyri pisiformis pr. Kursk Rossiae. — Sociæ adsunt *Phleospora Caraganae* var. *Lathyri* et *Phyllosticta minussinensis* (?) quæ status ejusdem speciei habendæ sunt.

31. *Sphærella carinthiaca* (Jaap) Sacc. et Trott., *Mycosphaerella ca-* 3739

rinthiaca Jaap, Ann. Mycol. VI (1908) p. 210. — Maculis sæpius internerviis, superne brunneis, inferne griseo-virentibus; peritheciis gregariis copiosis, hypophyllis, minutissimis, globosis, 40-90 μ . diam., poro rotundo 12-15 μ . diam. pertusis, atro-brunneis; ascis oblongis, dein cylindraceis, apice rotundatis, fasciculatis, sessilibus, a paraphysatis, 34-40 \times 8-10, octosporis; sporidiis oblongo-fusoideis vel clavulatis, rectis v. curvulis, 10-14 \times 2,5-3, bicellularibus, ad septum medium non constrictis, hyalinis, di-tristichis.

Hab. parasitica in foliis vivis Trifolii medii pr. Obersee-land in Alpibus austriacis.

32. *Sphærella Magnusiana* (Jaap) Sacc. et Trott., *Mycosphaerella Ma-* 3740
gnusiana Jaap, Ann. Mycol. VI (1908) p. 209. — Peritheciis gre-

garis, per exiguis, nigris, globosis, 80-100 μ . diam.; contextu parenchymatico atro-brunneo; ascis versiformibus, ellipsoideis v. clavulatis, saepe quoque saccatis, sursum tenuatis, obtusulis v. rotundatis, 36-40 \times 12-20, octosporis, apophysatis; sporidiis irregulariter positis, oblongo-ovoideis v. breviter clavatis, utrinque rotundatis, 15-17 μ . long., bicellularibus, hyalinis, 2-4-guttatis, cellula sup. 6-7 μ . cr., inferiore 5-6 μ . cr.

Hab. in foliis vivis *Astragali alpini* pr. S. Ulrich et pr. Bad Ratzes in Alpibus austriacis.

33. *Sphaerella Crotalariae* Petch, Ann. Roy. Bot. Gard. Peradeniya 3741 III (1906) Pt. I, p. 2. — Maculis latis, pallide brunneis zonatis; peritheciis gregariis, erumpentibus, atris 200 μ . diam.; ascis cylindraceis, octosporis, 42 \times 13; sporidiis distichis, fusoideis, 1-septatis, hyalinis, 17-18 \times 4-5.

Hab. in foliis *Crotalariae* striatæ in ins. Ceylon. — Ad-sunt pycnidia (*Phyllosticta Crotalariae* dicenda) erumpentia, peritheciis mixta, nigra, 90-130; sporulis ellipsoideis, continuis, hyalinis, 6-9 \times 2-3, in cirrum expulsis. Adest quoque st. conidiophorus (*Cercospora Crotalariae* dicenda): conidiis hyalinis rectis v. subcurvatis, multiseptatis, apice v. latere hypharum fasciculatarum minute papillatarum dispositis, in maculis brunneis.

34. *Sphaerella cuprea* Sacc., Ann. Mycol. VII (1909) p. 432. — Ma- 3742 culis amphigenis, lateritio-cupreis, e circulari angulosis, 4-6 mm. diam., confluentibus, margine (præcipue in maculis epiphyllis) pa-rum elevato, angustissimo nigricante cinctis; peritheciis dense gregariis, globosis v. globoso-lenticularibus, in epiphylo evidentioribus et nitidulis, 80-120 μ . diam., poro centrali pertusis, nigricantibus; ascis fasciculatis oblongo-clavulatis, subsessilibus, apice obtusis, 35-50 \times 6, apophysatis, octosporis; sporidiis subdistichis, fusoideis, utrinque obtusiusculis, 14-15 \times 2,5-2,7 medio 1-septatis, non constrictis, hyalinis, saepe curvulis.

Hab. in foliis languidis *Ceratoniae* Siliquæ in Horto botanico neapolitano (L. CUFINO). — A *Sphaerella Ceratoniae* Pass. videtur omnino diversa.

35. *Sphaerella eryngiicola* Speg. Fungi Chilenses (1910) p. 53, cum 3748 icon. — Maculis nullis; peritheciis amphigenis immersis inter nervationes subseriatis, subconoideis, glabris, atris, membranaceis, 50-90 μ . diam.; ascis obclavulatis brevissime pedicellatis, 30 \times 5-6; sporidiis subclavulatis ad medium 1-septatis, non vel vix constrictis, hyalinis, 10 \times 2,5.

Hab. in foliis siccis subputrescentibus *Eryngii* paniculati, Cerro Caracol de Concepcion, Chile America austr. — A *Sph. Eryngii* (Wallr.) Cke. omnino diversa.

36. *Sphærella fœniculina* Speg., Fungi Chilenses (1910) pag. 54. — 3744
Maculis nullis; peritheciis confertiusculis, epidermide tectis, sub-lenticularibus, 100-120 μ . diam., membranaceo-corallaceis, glabris, nigris, ostiolo minuto perforatis; ascis ovato-elongatis subsessilibus; sporidiis conglobatis cylindraceo-subclavulatis 1-septatis non vel vix constrictis, 18-20 \approx 5-6, hyalinis.

Hab. in foliis *Fœniculi piperiti* in collibus circa Batuco Chile Amer. austr.

37. *Sphærella Fœniculi* Speg., An. Mus. Nac. Buenos Aires t. XIX 3745 (1909) p. 353. — Maculis nullis sed matrice tota sordidiuscule cinerescente; peritheciis laxiuscule gregariis, epidermide velatis numerosissimis, e lenticulari conoideis, 75-100 μ . diam., minute papillato-ostiolatis, atris glabris corallaceis; ascis cylindraceo-clavulatis crasse tunicatis, 75-80 \approx 16-18, aparaphysatis, octosporis; sporidiis obovato-didymis, distichis, medio 1-septato-constrictis, loculo supero subgloboso, infero conoideo nonnihil minore, hyalinis, 16-20 \approx 9-10.

Hab. ad caules aridos putrescentes *Fœniculi piperiti* circa Santa Catalina, Buenos Aires Rep. Argentina, Amer. austr.

38. *Sphærella Bupleuri* Rota-Rossi, III Contr. Mic. Bergamo, Atti 3746 R. Ist. bot. Pavia ser. II, v. XIII p. 207 (extr. 1907). — Peritheciis gregariis, erumpentibus, globosis, atris, 135-200 μ . diam.; mycelio fusco, septato; ascis ovoideo-ellipsoideis, basi ventricosis, octosporis 50-70 \approx 20-22; sporidiis polystichis, oblongo-clavulatis, medio 1-septatis et constrictis, 4-guttulatis, hyalinis, 18-22 \approx 5-7.

Hab. in foliis siccis *Bupleuri graminifolii*, Pizzo Arera Bergamo Italiae bor. (G. B. TRAVERSO).

39. *Sphærella Ægopodii* (A. Pot.) Sacc. et Trav. - Syll. XX, p. 817. - 3747
Mycosphærella Ægopodii Pot., Ann. Myc. 1910, p. 49, f. 1 et f. 5:1.
— Peritheciis subsuperficialibus; ascis fasciculatis, 50-60 \approx 14, non-nullis apicem versus angustatis et tunc longioribus; sporidiis medio septatis, non constrictis, 18-19 \approx 5, loculo inf. paullo angustiori (4 μ .).

Hab. in foliis hibernatis *Ægopodii Podagrariae* a *Sepatoria Podagrariae* invasionis, prov. Kursk Rossiaæ. — *Phyllachora Podagrariae* Lasch forte eadem species est. — Sec. Potebnia ut

pycnidia verisimiliter spectant: *Septoria Podagrariae* et *Phyllosticta Ägopodii*.

40. **Sphærella Ferulæ** L. Maffei in Atti dell' Ist. botanico di Pavia, 3748 ser. II, vol. XI, p. 30 (extr. 1905) t. XXI, fig. 1-5 (ex err. sub nom. *Sph. caulincola*), et v. XIII, Micol. Ligustica, Extr. p. 5. — Peritheciis dense gregariis, globosis, primum epidermide tectis, demum ostiolo fere papillato pertusis; ascis cylindrico-clavatis, 160-180 \times 21-25, aparaphysatis, octosporis; sporidiis monostichis, cylindraceo-ellipsoideis, obtusis v. acutiusculis 1-septatis, ad septum leniter constrictis, loculis inaequalibus, hyalinis, guttulatis, granulosis, 19-28 \times 6-9.

Hab. in caulis siccis Ferulæ communis in insula Gallinara Liguriæ, Ital bor.

41. **Sphærella Cryptotæniæ** P. Henn., Engl. Jahrb. XXXVII (1905) 3749 p. 161. — Maculis sparsis, rotundatis, albidis, zona fusco-brunnea cinctis; peritheciis epiphyllis, minutissimis, atris, subhemisphaericis, pertusis, 60-70 μ . diam.; contextu atro-membranaceo; ascis fasciculatis, aparaphysatis, oblongo-ovoideis v. clavatis, obtusis, octosporis, 25-32 \times 8-11; sporidiis distichis v. subtristichis, oblongis v. fusoides, obtusis, medio 1-septatis, hyalinis, 9-11 \times 3.

Hab. in foliis Cryptotæniæ japonicæ, Wakayama Japoniæ (H. NAKASHIKI).

42. **Sphærella Escalloniæ** Spegazz., An. Mus. Nac. Buenos Aires 3750 t. XIX (1909) pag. 351. — Maculis orbicularibus, 1-5 mm. diam., superne albescensibus fusco-marginatis; peritheciis gregariis erumpentibus, saepius epiphyllis e conoideo lenticularibus 100-120 μ . diam., atris, glabris membranaceis; ascis lanceolatis sessilibus, 50-60 \times 14, octosporis; sporidiis di-tristichis rectis hyalinis, 16-18 \times 3-4, loculis æquilongis, minute biguttulatis.

Hab. ad folia viva Escalloniæ roseæ in dumetis prope Nahuel-huapi, Rep. Argentina, Amer. austr.

43. **Sphærella Audibertiae** Rehm, Ann. Mycol. VII (1909) p. 533. — 3751 Peritheciis caulem cinerascentem late obtegentibus, gregariis, primis sub epidermide nidulantibus, dein erumpentibus, globulosis, haud papillatis, nigris, glabris, c. 120 μ . diam.; ascis clavatis, obtusis 35 (an 85?) \times 15-18, 8-sporis; sporidiis oblongis, utrinque obtusis, medio septatis, vix constrictis, utraque cellula biguttulata, hyalinis, 18 \times 6; paraphysibus nullis.

Hab. ad caules Audibertiae polystachyæ, Mounts prope Claremont California, Amer. bor. (C. F. BAKER).

44. *Sphaerella Salviæ* Strasser, Verh. zool.-bot. Ges. Wien Bd. LVII 3752 (1907) p. 311. — Peritheciis amphigenis, late sparsis, subsuperficialibus, globosis, membranaceis, atro-brunneis, 40-60 μ . diam.; ostiolo impresso denique pertuso; contextu pseudoparenchymatico; ascis tereti-oblongis, 40 \times 7-8; sporidiis fusoideo-clavulatis; bicellularibus, 10-12 \times 3-4; medio valde constrictis, loculo super. crassiore et breviore, infer. angustiore.

Hab. in foliis siccis *Salviæ glutinosæ* ad Sonntagberg Austriae. — *Sphaerellæ Carlinae* proxima.

45. *Sphaerella Lysimachiae* v. Höhn. in Strasser, III Nacht. Pilz. 3753 Sonntagberges in Verhandl. zool. bot. Gesell. Wien, 1905, p. 605. — Peritheciis nigris nitidulis, crebro gregariis v. sparsis, globosis, prominentibus, 100 μ . diam.; ascis aparaphysatis, crasse clavatis, paucis, 30 \times 8; sporidiis octonis, bicellularibus, 2-3-stichis, 8-14 \times 3-4 (raro 16 \times 4,5) utrinque obtusule tenuatis, medio leviter constrictis; cellula sup. crassiore.

Hab. in foliis siccis *Lysimachiae vulgaris* ad Sonntagberg-Austriae. (STRASSER).

46. *Sphaerella midzurensis* (Bab.) Sacc. et Trott., *Mycosphaerella midzurensis* Bubák et Ranojevic, Ann. Mycol. VIII (1910) p. 360. — Peritheciis sparsis, subepidermicis, dein erumpentibus, globosis, ostiolo papilliformi præditis, membranaceis, 200 μ . circ. diam., contextu obscure brunneo; ascis elongatis v. ovoideo-elongatis, basi in pedicellum longum crassum attenuatis, supra rotundatis, quandoque etiam angustatis, tunica crassa subgetatinosa præditis, 60-75 \times 19-22; sporidiis plerumque ad basim asci congregatis (6), cæteris duobus supra v. regulariter in asco distributis, 19-22 \times 5-6, elongatis v. fusoideis, utrinque plerumque attenuatis, ibique rotundatis, pariete transversa præditis, non constrictis, hyalinis.

Hab. in caulibus siccis, foliis petiolisque *Androsaces carnea*, M. Midzur, alt. 2168 m., Serbia.

47. *Sphaerella Aretiæ* (v. Höhn.) Sacc. et Trott., *Mycosphaerella Are-tiae* v. Höhnel, Fragm. Mykol., III, Sitbz. K. Akad. d. Wissenschaften. Wien Bd. CXVI Abt. I (1907) p. 110. — Peritheciis sparsis v. 2-3 approximatis, saepius epiphyllis, globosis, indistincte papillatis, subcutaneis, demum semiemergentibus, nigris, nitidulis, 100-140 μ . diam.; contextu ex 4-5 stratis cellularibus atro-brunneis formato; ascis aparaphysatis, crassiuscule tunicatis, clavatis, brevissime noduloso-stipitatis, octosporis, 48-60 \times 9-10; sporidiis distichis, ob-

longo-clavulatis, utrinque obtusulis, 14-19 \times 4-5, ad septum medium non constrictis, cellula superiore leniter crassiore.

Hab. in imis foliis morientibus *Aretiæ alpinæ* ad Gurgle-Vent Tiroliae (Dr. GINZBERGER).

48. *Sphaerella Ludwigiana* Sacc. et Har. in Sacc., Not. myc. VIII, 8756 Ann. Myc. v. IV (1906) pag. 490, tab. X, fig. 1. — Peritheciis laxe gregariis, peregrinis, punctiformibus, epidermide vix tumidula velatis, atris, depresso globosis 60-80 μ . diam., glabris, apice poro impresso, 8 μ . diam. pertusis; contextu minute parenchymatico fuligineo, circa ostium saturatiore; ascis subglobosis v. globoso-ellipsoideis, utrinque rotundatis, subsessilibus, 15 μ . diam. v. 18-20 \times 13-14, octosporis, a paraphysatis; sporidiis 3-4-sticho-conglobatis, oblongis, utrinque rotundatis, medio 1-septatis, non vel vix constrictis, 10-12 \times 3, hyalinis.

Hab. in caulibus emortuis *Globulariæ vulgaris*, Lurdy Galliae, 1906 (LUDWIG, comm. P. HARIOT). — Affinis *Sphaerellæ Ariadnæ* et *Sph. minori* quæ tamen satis diverse.

49. *Sphaerella Columbi* (Rehm) Sacc. et Trott., *Mycosphaerella Columbi* Rehm, Ann. Mycolog. VI (1908) pag. 120; Ascom. Exsicc. fasc. 41, n. 1764. — Maculis orbicularibus, fuscis, concentrica zo-natis, 5 mm. diam., epiphyllis, minus distincte hypophyllis; peritheciis gregariis, innatis, erumpentibus, globulosis, atris, glabris, 70-90 μ . diam., poro pertusis, basi hyphis fuscidulis, 4-5 μ . cr. in contextum parenchymaticum peritheciorum abeuntibus obsessis; ascis obovatis, 25-27 \times 12, octosporis; sporidiis clavulatis, utrinque obtusis, medio subconstricto-septatis, grosse 4-guttatis, hyalinis, 12-14 \times 4-4,5 distichis; paraphysibus nullis.

Hab. ad folia viva *Plantaginis Rugelii*, Columbus, Ohio Amer. bor. — A ceteris speciebus plantaginicolis satis distincta.

50. *Sphaerella peregrina* Starb., Ascom. Schwed. Chaco-Cordill. Exp., 3758 Arkiv. f. Bot. Bd. V (1905) pag. 21, fig. 16. — Peritheciis numerosissimis, caules totos nebulosim ambientibus, sparsim gregariis, interdum confertis, immersis vix prominulis globuloso-lenticularibus, poro minuto pertusis, contextu membranaceo, cellulis proportione magnis, polyedricis composito, nigricantibus, minutissimis, 75-100 μ . diam.; ascis octosporis, late obclavatis, sursum detruncto-obtusis, late sessilibus, 30-33 \times 7,5-9; sporidiis conglobatis vel superioribus distichis, primo intra ascos quadriguttulatis deinde medio septatis, clavulatis, hyalinis, 12,5-13 \times 3,5 μ ; paraphysibus nullis.

Hab. in caulis Compositarum speciei, Tarija Boliviæ. — *M. alienæ* Passer. affinis videtur, sed forma ascorum sporidiorumque differt; cfr. etiam *M. ambigua* Fautr. et Lamb.

51. *Sphaerella Bakeri* (Rehm) Sacc. et Trott., *Mycosphaerella Bakeri* 8759 Rehm, Ann. Mycol. VII (1909) p. 533. — Peritheciis gregariis, conoideis, minutissime papillulatis, atris, glabris, primitus innatis, dein prominentibus, c. 200 μ . diam.; ascis piriformibus, lata basi sessilibus, 8-sporis, 50 \approx 18; sporidiis oblongis, subconoideis, utrinque subacutatis, medio paullulum constrictis, utraque cellula apice guttulata, hyalinis, 18 \approx 6; paraphysibus nullis.

Hab. ad caules Gnaphalii emortuos, Mounts prope Claremont Californiae (C. F. BAKER).

52. *Sphaerella Serratulæ* Hollós, Ann. Mus. Nat. Hung. VI (1908) 8760 VI, p. 528. — Peritheciis epidermide velatis, gregariis, globulosis, nigris, 100-120 μ . diam., poro pertusis, contextu parenchymatico; ascis clavatis, estipitatis, 6-8 sporis, 30-35 \approx 8-10, a paraphysatis, sporidiis inordinate distichis, oblongis, utrinque leviter attenuatis et rotundatis, medio septatis, vix constrictis, hyalinis, 12-14 \approx 3,5-4, loculo superiore plerumque paullo crassiore.

Hab. in caulis siccis Serratulæ tinctoriae, prope Kecskemét Hungariae.

53. *Sphaerella Aronici* (Volkart) Sacc. et Trav., *Mycosphaerella Aronici* 8761 Volk. in Ber. deut. bot. Gesell. XXI, pag. 480, tab. 25, fig. 4-6 (1908), *Sphaerella?* *Aronici* Fuck. — Syll. I, pag. 538 [status metageneticus, non st. ascophorus]. — Peritheciis in maculis amphigenis variæ magnitudinis, viridi-atris, subvelutinis insidentibus, plerumque epiphyllis, immersis, globosis, atris, 140-160 μ . diam., poro circulari pertusis, excipulo crasso pseudoparenchymatico; ascis clavatis v. ellipsoideo-ventricosis, subsessilibus, paucis, 50-80 \approx 25-40; sporidiis subtristichis, ellipsoideo-cylindraceis v. subovoideis, utrinque obtusis, prope medium septatis, non constrictis, eguttulatis, loculo superiore interdum crassiusculo, hyalinis vel dilutissime luteolis, 30-40 \approx 9-10. Status conidicus: *Fusicladium Aronici* (Fuck.) Sacc. — Syll. IV, p. 347; st. pyrenidicus: *Phyllosticta Aronici* (Fuck.) Sacc. — Syll. III, p. 45.

Hab. in foliis languidis Doronicorum, præcipue Doronici (Aronici) scorpioidis et Clusii in Germania, Austria, Helvetia, Italia.

54. *Sphaerella mutisiicola* Spegazz., Fungi Paul., Rev. Mus. La Plata 8762 t. XV (1908) p. 20. — Maculis epiphyllis sparsis repandis, 2-10 mm.,

cinerescentibus subcallosis subdefinitis; peritheciis centro macularum solitariis v. pauci-gregariis erumpentibus lenticularibus, 80-90, μ . diam., minute ostiolatis, glaberrimis, coriacellis, atris, contextu minute denseque parenchymatico subindistincto, atro-fuligineo; ascis aparaphysatis, antice obtuse rotundatis crasseque tunicatis, postice rotundato-cuneatis, minute stipitatis 50-60 \times 10-14, octosporis; sporidiis oblique distichis v. polystichis, clavulatis, reticis v. leniter curvulis, parum supra medium septatis, loculo supero elliptico ovato, infero, cylindrico-concideo, acutiore, 18-20 \times 4, hyalinis.

Hab. ad folia languida *Mutisia* sp. cuiusdam prope São Paulo, Brasilia (ÜSTERI).

55. *Sphærella Balsamorrhizæ* (Earle) Sacc. et Trott., *Mycosphærella* 3763
Balsamorrhizæ Earle, Bull. of the New York Bot. Gard. (1904)
 p. 292. — Peritheciis per latas areas densiuscule sparsis innatis, nigris lenticularibus, non collapsis, 200-225 μ . diam., contextu laxiuscule celluloso, cellulis 10-12 μ . diam., ostiolo minuto, perforato; ascis anguste ellipsoideis, breviter stipitatis, 60-70 \times 14, aparaphysatis; sporidiis distichis anguste ovoideis, inæqualiter 1-septatis, leviter constrictis, 18-20 \times 7-8.

Hab. in caulinis emortuis *Balsamorrhizæ* sp., King' Canon, pr. Carson Nevada Amer. bor. (C. F. BAKER).

56. *Sphærella Pereziæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 3764
 (1909) p. 354. — Maculis nullis, matrice arescente fragili sordide cinerescente; peritheciis laxe gregariis coriacellis, parenchymate innatis, epidermide tectis adnatisque sèpius epiphyllis lenticulari-hemisphæricis, 100-120 μ . diam., minute umbilicato-ostiolatis; ascis, subcylindraceis apice crasse tunicatis, aparaphysatis octosporis, 55-65 \times 10-12; sporidiis elliptico-didymis, medio modice 1-septato-constrictulis, 14-15 \times 5, hyalinis.

Hab. ad folia arida putrescentia *Pereziæ patagonicæ* in aridis secus Rio Santa Cruz Rep. Argent. Amer. austr.

57. *Sphærella Proustiæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 3765
 (1909) p. 353 cum icon. — Maculis nullis sed matrice tota cinerescenti-arescente; peritheciis parenchymate innatis confertis, udis subhemisphæricis 100-120 μ . diam., siccis minute ostiolato-perforatis, membranaceis; ascis subclavatis 60-70 \times 11-12, octosporis aparaphysatis; sporidiis subacicularibus subcurvulis, 1-septatis ad septum non constrictis, 32-38 \times 3-4, hyalinis.

Hab. vulgata ad folia dejecta arida *Proustiæ ilicifoliæ* in

præandinis Cacheuta, prope Mendoza Rep. Argentina Amer. austr.
— An potius *Ophiosphærellæ* species?

58. *Sphærella leptosperma* Speg., Fungi Chilenses (1910) p. 55. — 3766

Maculis nullis; peritheciis epiphyllis erumpenti-subsuperficialibus sparsis v. laxe gregariis, nigris, glabris, subhemisphaericis, coriacelis, ostiolo minuto perforatis, 90-100 μ . diam.; ascis subellipsoideis breviter cuneato-pedicellatis, 35-38 \times 10; sporidiis conglobatis cylindraceo-fusoideis, hyalinis, medio 1-septatis, non constrictis, 18-20 \times 3.

Hab. in foliis dejectis subputrescentibus *Proustia* pirifoliae, Cerro Caracol de Concepcion, Chile Amer. austr. — *Sphæra Proustiae* Speg. affinis sed differt ascis sporidiisque minoribus.

59. *Sphærella Fraxini* Niessl in Linhart, Fungi hungar. n. 162 (1883); 3767

Winter, Pilze, II, pag. 385. — Peritheciis hypophyllis, nigris, cæspitosis vel dense confertis, maculas griseas effusas formantibus, minutis, globosis, ostiolo punctiformi; ascis clavato-oblongis, subsessilibus, octosporis, 55-70 \times 10-13; sporidiis confertis, lanceolato-fusiformibus, rectis vel curvatis, utrinque obtusis, uniseptatis et parum constrictis, subhyalinis, 26-28 \times 4.

Hab. in foliis dejectis *Fraxini excelsioris*, Markt-Au prope Ung.-Altenburg (LINHART) et Riva Valsesia (CARESTIA).

60. *Sphærella Tupæ* Speg., Fungi Chilenses (1910) p. 58. — Macu. 3768

lis nullis; peritheciis sparsis v. laxe gregariis minute erumpentibus, pusillis, atris glabris, ostiolo minute perforatis, 80-90 μ . diam.; ascis obclavulatis subsessilibus, 35-40 \times 8, apophysatis; sporidiis distichis, hyalinis, clavulatis, parvis, 1-septato-constrictulis, 9-10 \times 2,5.

Hab. in ramis emortuis *Lobelia* salicifoliae, Cerro Ale gre de Valparaiso Chile Amer. austr.

61. *Sphærella Pantacanthæ* Spegazz., An. Mus. Nac. Buenos Aires 3769

t. XIX (1909) p. 354. — Foliis infectis totis sordide fusco-cinerescentibus aridis fragilibus; peritheciis lenticularibus 70-90 μ . diam. parenchymate innatis, epidermide tectis, ostiolo lato pertusis; ascis e cylindraceo subclavulatis, apophysatis octosporis 40-50 \times 6-7; sporidiis e cylindraceo fusoideis distichis, 1-septatis non constrictis, 10-12 \times 2-2,5, loculis æquilongis, infero saepius acutiore, rectis, hyalinis.

Hab. frequens ad folia arida *Pantacanthæ* Ameghinoi in aridis Chubut, Patagonia, Amer. austr.

62. *Sphærelia Tabaci* Maubl., Bull. Soc. Myc. Fr. XXIII (1907) 3770

p. 142 t. XX f. 8-10. — Peritheciis conoideo-globosis, basi applanatis, ostiolo prominulo præditis, 125-150 \approx 100-120; ascis cylindricis, apice rotundatis, basi breviter pedicellatis, octosporis, aparaphysatis, 50-67 \approx 10-13,5; sporidiis oblique monostichis, ovoides, 1-septatis, ad septum leniter constrictis, primum hyalinis demum dilutissime griseis, 14-16,5 \approx 6,5-7,5, loculo sup. latiore.

Hab. in caulinis Nicotianæ Tabaci, Razac, Dordogne Galliae. — *Affinis Sph. Nicotianæ.*

63. *Sphaerella Asperifolii* B. R. S. in Saccardo, Not. Myc. VI, Ann. 3771 Myc. v. VI (1905) p. 508. — Peritheciis globulosis, epiphyllis, innato-prominulis, nigris, minutissimis, dense approximatis, leibus, 50-75 μ . diam., poro latiusculo pertusis; ascis clavato-oblongis, sessilibus, rosulatis, aparaphysatis, 28-30 \approx 5-6; sporidiis distichis, fusoideis, curvulis, medio 1-septatis, non v. vix constrictis, utrinque acutiusculis, 8-9 \approx 2-2,5 hyalinis.

Hab. in foliis emortuis Cynoglossi, La Panne pr. Furnes Belgii (M. Rousseau). — Forte initio in foliis nondum emortuis maculas generat.

64. *Sphaerella viburnicola* Speg., An. Mus. Nac. Buenos Aires t. XIX, 3772 (1909) p. 356. — Maculis nullis sed matrice tota arescente atque sordide cinerescente; peritheciis hinc inde 5-30 gregariis sed non constipatis, prominulis sed epidermide velatis, e lenticulari conoides, 80-100 μ . diam., ostiolo minutissimo umbilicato perforatis, glabris, atris, membranaceis; ascis cylindraceis, aparaphysatis, octosporis, 40-45 \approx 7-8; sporidiis subclavulato-didymis, distichis, 1-septatis, hyalinis loculis subæquilongis, 10-2,5-3.

Hab. ad folia dejecta putrescentia Viburni Tini in hortis Santa Catalina, Argentina Amer. austr. — A *Sphær. Lantanæ* (Nits.) Auersw. ascis cylindraceis sporisque crassioribus distincta videtur.

65. *Sphaerella Weigeliae* (Fairm.) Sacc. et Trott., *Mycospharella* Fairm. 3773 Ann. mycol. (1910) p. 326. — Peritheciis minutis, gregariis, atris, hypophyllis; ascis cylindraceis, apice rotundatis, breve stipitatis (8-sporis ?); sporidiis subdistichis, oblongo-fusiformibus, primo 2-guttulatis, dein uniseptatis, hyalinis, 10-13 \approx 2-3.

Hab. ad folia dejecta Weigeliae roseæ cultæ Lyndonville N. Y. Amer. bor.

66. *Sphaerella Molluginis* Rehm, Ann. Mycol. VII (1909) pag. 527, 3774 Ascom. exsicc., fasc. 45, n. 1861. — Peritheciis dispersis, rarius gregariis, innatis, globoso-conoideis, glabris membranaceo-contextis,

0,15 mm. diam., nigris, papillula minutissima demum per periderium haud maculatum prominente; ascis subcylindraceis, brevisime stipitatis, 65 ~ 10, 8-sporis; sporidiis fusiformibus utrinque acutatis, medio septatis et subconstrictis, utrinque cellula biguttata, hyalinis, 12-18 ~ 4-5, distichis; paraphysibus nullis.

Hab. ad caules sicclos Galii Molluginis, Hinterstein Alpium Algoviae (Dr. REHM).

67. *Sphærella ricinicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 3775 (1909) p. 355. — Peritheciis parvulis lenticulari-convexulis 90-120 μ . diam., subepidermicis, hinc inde confertiusculis, tenui-membranaceis, ostiolo latiusculo umbilicato perforatis; ascis obclavatulis 50 ~ 8-10, aparaphysatis octosporis; sporidiis e fusoideo suclavulatis e disticho conglobatis, rectis, loculis subæquilongis, biguttulatis, hyalinis, 15 ~ 5.

Hab. ad ramos aridos dejectos suoputrescentes Ricini communis, La Plata, Argentina Amer. austr.

68. *Sphærella pachythecia* Speg., Fungi Chilenses (1910) p. 56. — 3776 Maculis amphigenis, orbicularibus determinatis, ad hypophyllum fuscis ad epiphyllum arescenti-cinereis, areola denticulata atro-fusca cinctis; peritheciis epiphyllis, centro cinereo macularum sub epidermide gregariis, pusillis, hemisphæricis, nigris, glabris, membranaceo-perenchymaticis, ostiolo minuto perforatis, 75-100 μ . diam.; ascis ovatis v. obovatis brevissime crasseque pedicellatis, 25-30 ~ 9-10; sporidiis oblanceolatis, parvis, hyalinis, 1-septatis, non constrictis.

Hab. in foliis languidis v. siccis Cryptocaryæ Peumus, Cerro Caracol de Concepcion, Chile Amer. austr.

69. *Sphærella chenopodiicola* Speg., An. Mus. Nac. Buenos Aires 3777 t. XIX (1909) p. 351. — Maculis nullis vel parum manifestis; peritheciis pusillis lenticularibus laxe gregariis udis hemisphæricis 75-90 μ . diam., nigris, glabris membranaceis, ostiolo majusculo umbilicato perforatis; ascis subclavulatis breviter cuneato-pedicellatis, octosporis, aparaphysatis, 40-45 ~ 8-10; sporidiis ellipsoideo-didymis septo constrictulis, loculis æquilongis minute biguttulatis hyalinis, 11-13 ~ 3-3,5.

Hab. ad caules aridos putrescentes Chenopodii hircini Ensenada, prope La Plata, Argentina America austr.

70. *Sphærella Woronowii* (Jacz.) Sacc. et Trott., *Mycosphærella Woronowii* Jacz. in Woronow, Contrib. ad Mycofloram Caucasi, Tiflis (1910) pag. 143. — Maculis rotundatis v. angulatis, ochraceis, fu-

sco-cinctis; peritheciis minutis nigris, prominentibus, epiphyllis, ostiolo minuto conico; ascis clavatis 60-80-100 \approx 12; paraphysibus nullis; sporidiis hyalinis, bicellularibus, curvatis v. rectis, constrictis, 17-20 \approx 4-6.

Hab. in foliis languescentibus Juglandis regiae in Abchazia, Caucasus (G. WORONOW).

71. **Sphærella Ficus** Trav. et Spessa, Bol. Soc. Broter. vol. XXV 3779 (1910) pag. 170, t. I, f. 2. — Peritheciis hypophyllis, hinc inde dense gregariis, per epidermidem erumpentibus, sphæroideis, atris 70-90 μ . diam., poro angusto praeditis; contextu subcarbonaceo, fuligineo-atro; ascis clavato-fusoideis vel subcylindraceis, apophysatis, octosporis, 45-50 \approx 6-8; sporidiis subdistichis, fusoideis, utrinque acutiusculis, medio septatis et ad septum non constrictis, 10-12 \approx 2 $\frac{1}{2}$ -3, hyalinis.

Hab. in pagina inferiore foliorum Ficus macrophylla in Horto botanico conimbricensi (A. MOLLER). — A *Sph. sycophila* Wint. peritheciis gregariis et fere maculas efformantibus, ascis multo majoribus et sporidiis typice subdistichis, rectis, acutiusculis differt.

72. **Sphærella Elasticæ** (Koord.) Sacc. et Trav. — Syll. XX, p. 820, 3780 *Mycosphaerella Elasticæ* Koord., Botan. Untersuch. (1907) p. 189, fig. 16, II. — Maculis nullis; peritheciis innatis, crustaceis, glabris, nigris, globosis, gregariis, 50 60 μ . diam., amphigenis, ostiolo papilliformi erumpente; ascis cylindraceis, fasciculatis, 40-45 \approx 4-4,5, apice obtusis; sporidiis hyalinis, clavato-cylindraceis, basi angustatis, apice truncatis, basi obtusis, medio 1-septatis, 7-9 \approx 2-2,5 subdistichis.

Hab. in foliis putrescentibus Fici elasticæ prope Loano, Purworedio etc. prov. Kedu ins. Java (KOORDERS).

73. **Sphærella Nothofagi** Speg. An. Mus. Nac. Buenos Aires, t. XIX 3781 (1909) p. 352. — Maculis nullis vel quandoque matrice tota arescenti-albicante; peritheciis saepius 20-30 laxissime aggregatis, primo epidermide tectis dein plus minusve exertis, uds subhemisphæricis 90-110 μ . diam., siccis cupulato-collapseis, ostiolo vix papillato perforatis; ascis obclavatulis, 30 \approx 8, apophysatis, octosporis; sporidiis subdistichis utrinque obtusiusculis, cylindraceo-ellipsoideis, non v. vix constrictis, 8-10 \approx 2,5-3, loculis æquilongis, minute biguttulatis hyalinis.

Hab. ad folia emortua Nothofagi obliquæ et N. pro-

ceræ prope lago Nahuel-huapi, Argentina America austr. — A *S. antarctica* Speg. toto cœlo diversa.

74. *Sphaerella salicicola* (Fr.) Fuck. — Syll. I, p. 487 — f. *Amygdalinæ* Jaap in Abhandl. Bot. Ver. Brandenb. XLVII (1905) p. 85. 3782

— Peritheciis gregariis, hypophyllis, globoso-lenticularibus, nigris, 100 μ . diam., ostiolo 15 μ . diam.; ascis tereti-clavatis, 38 \times 5,5, octosporis; sporidiis ovato-oblongis, 9-11 \times 3, bicellularibus, vix constrictis, distichis.

Hab. in foliis Salicis amygdalinæ, Prignitz Borussiæ - Status conidicus videtur *Ramularia rosea* (Fuck.) Sacc.

75. *Sphaerella baldensis* C. Mass. ap. Sacc. in Ann. Mycolog. 1911, 3783

p. 250. — Peritheciis tenui-carbonaceis, erumpentibus, globulosis, hypophyllis, 70-80 μ . diam., in maculis vix distinctis suborbicularibus 1 mm. latis dense confertis, rarius subsparsis; ascis clavulatis breviter stipitatis, 25-32 \times 5-6; sporidiis oblongis, 1-septatis, hyalinis, 5-6 \times 2-2,5.

Hab. in foliis languidis Salicis arboreculæ in M. Baldo loco « Telegrafo » dicto. Legit doct. A. FORTI. — *Sphaerellæ salicicole* Fuck. proxima.

76. *Sphaerella grandispora* (Bub.) Sacc. et Trav. - Syll. XX p. 822, 3784

Mycosphaerella grandispora Bub. in Handel-Mazzetti Bot., Reis. Pont. Randgeb. in Ann. Naturhist.-Hofmus. Wien, XXIII (1909) p. 103, t. V, fig. 2 a-e. — Peritheciis sparsis v. hinc inde gregariis, subepidermicis, globosis, dein superiore parte conica erumpentibus, atris, 45-60 μ . diam., crasse tunicatis, contextu dense parenchymatico, castaneo-brunneo; ascis tantum 3-4 in perithecio evolutis, ovoideis v. ellipsoideis, 33-44 \times 22-29, apice valde incrassatis, octosporis; sporidiis cylindraceis 22-26 \times 6,5, rectis v. curvatis, in medio septatis, ibidem constrictis, utrinque attenuato-rotundatis hyalinis.

Hab. ad folia Narthecii Balansæ, in montibus ponticis Anatoliæ.

77. *Sphaerella Puyæ* Speg., Fungi Chilenses (1910) p. 57, cum icon. 3785

— Maculis nullis; peritheciis amphigenis, epidermide tectis, subseriatis pusillis atris, glabris, tenui-membranaceis, laxe parenchymaticis, 50-75 μ . diam., ostiolo latiusculo, usque ad 10 μ ., perforatis; ascis paucis ovatis v. obovatis brevissime crasseque pedicellatis, 20-25 \times 6-10; sporidiis subconglobatis e fusideo subclavulatis, 1-septatis non v. vix constrictis, 10-12 \times 2,5-3.

Hab. in foliis emortuis putrescentibus Puyæ chilensis, Cerro Alegre de Valparaiso, Chile Amer. Austr.

78. **Sphaerella montenegrina** Bubák, Bull. Herb. Boiss. 2 sér. VI (1906) 3786 p. 400. — Peritheciis in areis foliorum atratis insertis, plerumque ad apices, sparsis v. gregariis, nigris, globosis, 90-140 μ . diam., tectis dein papilla conica brevi erumpentibus, demum depresso ampulliformibus, contextu atro crassiuscule parenchymatico; ascis ovoideo-clavatis, basi abrupte in stipitem brevem productis, apice incrassatis, 50-66 \times 16-22, octosporis; sporidiis inordinatis, oblongo-ellipsoideis, 17-22 \times 4,5-6, bicellularibus, hyalinis, utrinque obtusule tenuatis.

Hab. in foliis emortuis Asphodelinæ luteæ pr. Kosciele Montenegro.

79. **Sphaerella Smilacis** Speg., An. Mus. Nac. Buenos Aires t. XIX 3787 (1909) p. 355. — Maculis saepius marginalibus elongato-repandulis determinatis anguste subviolaceo-marginatis; peritheciis innatis epidermide velatis lenticularibus 90-110, saepius epiphyllis, minute ostiolato-impressis, coriacellis; ascis subcylindraceis, aparaphysatis octosporis, 45-50 \times 10; sporidiis distichis medio septatis constrictulis, loculis subæqualibus, minute biguttulatis hyalinis, 18 \times 6.

Hab. ad folia languida Smilacis campestris in silvis se-eus Rio San Francisco, Jujuy Rep. Argentina Amer. austr.

80. **Sphaerella Lapageriæ** Speg., Fungi Chilenses (1910) pag. 54. — 3788 Maculis nullis; peritheciis innato-erumpentibus laxe gregariis sub-globosis, minutis coriacellis, 75-100 μ . diam., ostiolo impresso perforatis; ascis subcylindraceis deorsum cuneatis breviter nodulose-que pedicellatis, 50 \times 10, aparaphysatis; sporidiis e cylindraceo sub-fusoideis mediocribus saepius leniter inæquilateralibus, ad septum medium non constrictis, 15-20 \times 3.

Hab. in foliis siccis Lapageriæ roseæ, Cerro Caracol de Concepcion Chile Amer. austr.

81. **Sphaerella Alstræmeriæ** Speg., Fungi Chilenses (1910) pag. 52, 3789 (cum icon. p. 200). — Maculis fuscescensibus ellipticis indeterminatis; peritheciis laxe gregariis, lenticularibus minutis epidermide tectis membranaceis, 100-120 μ . diam.; ascis ovatis apice crasse tunicatis basi rotundatis sessilibus v. subsessilibus, 30-35 \times 16-20; sporidiis congregatis, subcylindraceis, parvis, loculis æquilongis biguttulatis, 14-15 \times 4-5.

Hab. in pedunculis floralibus siccis Alstræmeriæ sp., Cerro Alegre de Valparaiso Amer. austr.

82. **Sphaerella Wagneræ** (Earle) Sacc. et Trott., *Mycosphaerella Wagneræ* Earle, Bull. of the New York Bot. Gard. (1904) p. 292.

— Peritheciis per areas latae dealbatas densiusculæ sparsis, minutis, nigris, prominulis, non collabentibus, 100-150 μ . diam., ostiolo inconspicuo; ascis ellipsoideis v. saepius irregulariter fusoideis, 60-70 \times 20, aparaphysatis; sporidiis inordinatis, ellipsoideis, utrinque obtusis, 1-septatis, 16-18 \times 6-7, hyalinis.

Hab. in caule emortuo Wagneræ sp. King' Canon pr. Carson, Nevada Amer. bor. (C. F. BAKER).

83. **Sphaerella Galtoniae** Hollós, Ann. Mus. Nat. Hung. VI (1908) 3791 p. 528. — Peritheciis subcutaneo-erumpentibus, dense gregariis, globulosis, nigris, 100-120 μ . diam., ostiolo punctiformi, contextu parenchymatico; ascis clavatis, estipitatis, 6-8-sporis, 50-70 \times 20-22; sporidiis inordinate distichis, oblongis, utrinque rotundatis, medio 1-septatis, leniter constrictis, granulosis, hyalinis, 20-28 \times 7-8, loculo superiore plerumque paullo crassiore.

Hab. in caulibus siccis Galtoniae canticantis cultæ in horto, Kecskemét Hungariæ.

84. **Sphaerella Muscari** Hollós, Ann. Mus. Nat. Hungar. VIII (1910) 3792 p. 9. — Peritheciis epidermide velatis, dense gregariis, globulosis nigris, 80-100 μ . diam., poro pertusis, contextu celluloso; ascis clavatis, astipitatis, 6-8-sporis, 50-54 \times 16-18, aparaphysatis; sporidiis inordinate distichis, oblongis, utrinque rotundatis, medio 1-septatis, vix constrictis, hyalinis, 16-20 \times 5,5-6, loculo superiore paullo crassiore.

Hab. in caulibus siccis Muscari comosi prope Kecskemét Hungariæ.

85. **Sphaerella Burnati** (Cruchet) Sacc. et Trav. - Syll. XX, p. 818 - 3793 *Mycosphaerella Burnati* Cruchet in Bull. Soc. Vaud. Scienc. Nat. XLIV (1909) p. 473 c. fig. — Peritheciis amphigenis, epidermide decolorata grisea tectis, dense gregariis, globosis, ostiolo conico prominente apertis, 200 μ . et ultra diam.; ascis oblongis, basi latioribus, apice subattenuatis obtusisque, 65-80 \times 22-24, pedicello brevi praeditis; paraphysibus nullis; sporidiis 8, subdistichis, oblongis, utrinque obtusis, uniseptatis, ad septum leniter constrictis, hyalinis, in quoque loculo guttulatis, loculo superiore plerumque breviori et latiori, 27-33 \times 8-10.

Hab. in foliis languidis vel emortuis Lloydiæ serotinæ, in Alpibus Valesiacis Helvetiæ. — Socium adest *Asteroma Lloydii* Cruch.

- 86 **Sphærella Iridis** Awd. - Syll. I, pag. 524. - Sec. Cl. Sydow, in 3794

Mycoth. germ. fasc. XIV-XV, n. 677 (1908), et Ann. Myc. VI (1908) p. 479 species sic describenda: — Maculis amphigenis, oblongis, 28 mm. longis, griseolis; peritheciis amphigenis, gregariis, immersis, epidermide primo tectis, globosis vel depresso-globosis, atris, membranaceis, 60-110 μ . diam., poro minuto pertusis; ascis late ellipsoideis v. saccatis, apice plerumque rotundatis, basi saepius attenuatis, subsessilibus, 35-45 \times 17-20, octosporis; sporidiis substristichis, oblongis, utrinque rotundatis, circa medium septatis et plus minusve constrictis, 15-18 \times 4-6, hyalinis.

Hab. in foliis Iridis Pseudacori, I. pumilæ etc. in Germania, Britannia, Italia. — Var. *anceps* Sacc. Ann. Mycol. VII (1909) pag. 4. — A typo differt imprimis peritheciis hinc inde dense maculiformiter confertis, amphigenis et a *Sph. Desmazieri* ascis (etsi immaturis!) sporidiisque multo majoribus. — In foliis morientibus Iridis Pseudacori, Eichwalde pr. Berolinum (H. Sydow). — In exempl. immaturis: perithecia 120-130 μ . diam., ascii 60 \times 9; sporidia 12-15 \times 4 (?).

87. **Sphærella Musæ** Spegazz. An. Mus. Nac. Buenos Aires, t. XIX 3795

(1909) p. 354. — Maculis nullis vel fuscescentibus obsoletis; peritheciis innatis lenticularibus membranaceis, late ostiolato-perforatis, atris, glabris, 80-90 μ . diam.; ascis obclavatis, a paraphysatis, octosporis 38-40 \times 6-8; sporidiis e cylindraceo subfusoideis medio vix constrictis, loculis æquilongis, minute biguttulatis, 12-13 \times 2.

Hab. ad folia dejecta putrescentia Musæ sapientum in hortis Orán, Jujuy, Rep. Argentina Amer. austr.

88. **Sphærella Cannæ** Speg., An. Mus. Nac. Buenos Aires t. XIX 3796

(1909) p. 350. — Maculis nullis, matrice tota sordide pallescente; peritheciis innatis, sparsis v. laxissime gregariis amphigenis e lenticulari globulosis 90-100 μ . diam., submembranaceis atris, glabris; ascis fusoideis, breviter crassiusculeque pedicellatis 40 \times 10, a paraphysatis, octosporis; sporidiis ellipsoideo-fusoideis, didymis, 12 \times 4, loculis minute biguttulatis, infero leniter minore.

Hab. ad folia dejecta putrescentia Cannæ indicæ in horto Santa Catalina, prope Buenos Aires Rep. Argentina Amer. austr.

89. **Sphærella frenumbensis** Speg., Fungi Paul., Rev. Mus. La Plata 3797

t. XV (1908) p. 19. — Maculis arescentibus indeterminatis, 5-25 mm., amphigenis; peritheciis erumpentibus sparsis v. laxe gregariis plerumque epiphyllis, minutis, e globoso lenticularibus 75-100 μ . minute ostiolatis, atris, glabris, contextu parenchymatico fusco-fu-

ligineo; ascis ellipsoideis v. subovatis, crassissime tunicatis brevisimeque noduloso-pedicellatis, 30-40 \approx 8-10, aparaphysatis, octosporis; sporidiis subclavulatis, 10-12 \approx 8-10, loculis æquilongis donatis, ad septum non constrictis, congregabatis v. distichis, hyalinis.

Hab. ad folia languida Palmæ pinnatifidæ (Cocoës?) cuiusdam, prope Frenumbé Brasilia (USTERI). — Species *Sph. Gastonis* Sacc. peraffinis sed biophila et sporis nonnihil majoribus distincta.

90. **Sphærella chusqueicola** Speg., Fungi Chilenses (1910) p. 57. — 3798
Maculis nullis; peritheciis epiphyllis innato-erumpentibus superficialibus minutis, glabris, membranaceis, vix papillulato-ostiolatis 120-150 μ . diam.; ascis e cylindraceo-lanceolatis brevissime crasseque pedicellatis, 80 \approx 15-18; sporidiis e cylindraceo subclavulatis utrinque obtusis, medio 1-septatis non constrictis, hyalinis, medio-cribus, 18-20 \approx 5.

Hab. in foliis siccis non dejectis Chusqueæ Cumingii, Cerro Caracol de Concepcion, Chile Amer. austr.

91. **Sphærella Usteriana** Speg., Fungi Paul., Rev. Mus. La Plata t. XV 3799 (1908) p. 20. — Maculis nullis; peritheciis sparsis v. amphigenis seriatim constipatis et erumpentibus, hemisphærico-lenticularibus, 50-75 μ . cr., atris, glabris, minute ostiolatis, membranaceis, contextu parenchymatico fuligineo; ascis subfasciculatis, antice attenuato-obtusatis crassissimeque tunicatis, 26-28 \approx 13-14, aparaphysatis, octosporis; sporidiis congregabatis, subovatis 10-12 \approx 3, medio uniseptatis leniter constrictis utrinque obtusiusculis, hyalinis.

Hab. ad folia arida Oryzæ sativæ prope Sao Paulo, Brasilia (USTERI). — Species a cæteris in eadem matrice vigentibus satis riteque distincta.

92. **Sphærella Hondai** I. Miyake, Pilze Reispfl. Japan, Journ. College 3800 Agric. Tokyo, II (1910) p. 245 t. XIII, f. 9-11. — Peritheciis immersis, papilla tenui prominulis, globosis v. ellipsoideis, 50-60 μ . diam., raro 40 μ . v. 80 μ ., nigro-brunneis; ascis clavatis, breviter pedicellatis, rectis v. subcurvulis, 30-50 \approx 9-14, octosporis; sporidiis distichis v. irregulariter tristichis, bilocularibus, loculis inæqualibus, medio non constrictis, ovoideis, chlorinis, 10-14 \approx 3-4,5.

Hab. in foliis Oryzæ sativæ, Suigen, Korea (K. IWAMOTO), Tochigi, Iaponia (K. TSUCHIYA).

93. **Sphærella Shiraiana** I. Miyake, Pilze Reispfl. Japan, Journ. College 3801 Agric. Tokyo, II (1910) p. 242, t. XIII, f. 4-8. — Peritheciis immersis, globosis v. ellipsoideis, 70-95 μ . diam., 55-80 μ .

alt., nigris, pseudoparenchymaticis; ascis clavatis breviter pedicellatis 35-45 \times 11-15, octosporis; sporidiis supra plerumque tristichis infra monostichis, fusoideis, granuloso-farctis, 14-16 \times 4,5-5,5, bilocularibus, medio constrictis, loculis inæqualibus.

Hab. in foliis *Oryzae sativæ* in Japonia et China.

94. *Sphaerella bambusicola* (M. et H.) Sacc. et Trott., *Mycosphaerella* 3802
bambusicola Miyake et Hara in Bot. Mag. Tokyo (1910) p. (388)
 [Japonice].

Hab. in foliis *Bambusæ* sp. in Japonia.

95. *Sphaerella striatiformans* (Cobb) Sacc. et Trott., *Mycosphaerella* 3803
striatiformans Cobb B. A. Fungous Maladies of the Sugar-Cane
 III, Leav-Splitting, Blight, Hawaiian Sugar Planters Exp. St.
 Bull V (1906) pp. 93-106, Duggar Fung. Diseases, p. 263. — Fo-
 lia rimose findens et demum in filimenta redigens; peritheciis co-
 piosis, ascigeris....

Hab. in foliis *Sacchari officinarum*, cui valde noxia, in
 insulis Hawai. — A *Sph. Sacchari* Speg. videtur diversa.

96. *Sphaerella Calamagrostidis* (Volk.) Sacc. et Trott., *Mycosphaerella* 3804
Calamagrostidis Volk., Rehm Ascom. exsicc. n. 1667 (1906) (sine
 diagnosi). — Peraffinis *Sph. Tassiance* a qua differt peritheciis
 vertice non conoideis.

Hab. in foliis *Calamagrostidis variæ*, Fürstenalp, Graubünden Helvetiæ.

97. *Sphaerella kerguelensis* P. Henn., Deutsche Südpolar-Exped. VIII 3805
 (1906) p. 9 (extr.). — Peritheciis in maculis exaridis pallidis spar-
 sis, innato-erumpentibus, subglobosis, vertice perforatis, membra-
 naceis, atris, 80-100 μ . diam.; ascis fasciculatis, clavatis v. subfu-
 soideis, apice obtusis, substipitatis, curvatis, aparaphysatis, 25-30
 \times 10-13; sporidiis subdistichis v. congregatis, fusoideis, subacute-
 lis, hyalinis, medio 1-septatis, rectis v. curvulis, 10-12 \times 3-3,5.

Hab. in foliis vaginisque *Festucæ kerguelensis*, Ker-
 guelen-Station insul. Kerguelen (E. WERTH).

98. *Sphaerella paleicola* P. Henn., Deutsche Südpolar-Exped. VIII 3806
 (1906) p. 9 (extr.). — Peritheciis paleicolis sparsis vel gregariis,
 innato-suberumpentibus, globulosis, atro-membranaceis, poro per-
 turatis, 50-60 μ . diam.; ascis subovoideis vel late fusoideis, apice
 obtusis, tunicatis, octosporis, aparaphysatis, 22-28 \times 13-15; spori-
 diis congregatis, fusoideis, hyalinis, 1-septatis, 10-12 \times 3-3,5.

Hab. in paleis siccis *Festucæ erectæ* Südmore in insula
 Kerguelen.

99. *Sphaerella Ephedræ* Hollós, Ann. Mus. Nat. Hung. IV (1906) 3807 p. 331. — Peritheciis epidermide tectis, dense gregariis, depresso-globosis, nigris, apice pertusis, 100-150 μ . diam., contextu parenchymatico; ascis clavatis, estipitatis 6-8 sporis, 56-70 \times 20-24, apophysatis; sporidiis inordinate distichis, oblongis, medio 1-septatis, constrictis, utrinque rotundatis, initio hyalinis, dein flavidulis, 2-guttulatis vel eguttulatis, 16-24 \times 6-8, loculo superiore plerumque paullo crassiore.

Hab. in ramis siccis Ephedræ distachyæ prope Kecske-mét Hungariae.

100. *Sphaerella pinifolia* Ducomet, Ann. Ecole nat. Agricult. Rennes 3808 t. II (1908) extr. pag. 23, fig. 7-13. — Thallo præcipue superficiali; mycelio brunneo catenulato; pycnidii variabilibus, aliis parum evolutis, parvis, cupuliformibus, 20 μ . c. cr., aliis evolutis, ostiolatis, 60 μ . c. cr.; sporulis hyalinis fusiformibus, guttulatis, 5 \times 1,5; peritheciis scutatis, 86-110 \times 45-50; stratu corticali crasso et nigro; ascis curvatis 22-25 \times 7,5-9, octosporis; paraphysibus nullis; sporidiis hyalinis, bicellularibus, guttulatis, curvis, utrinque rotundatis, 9 \times 2,5-3.

Hab. in foliis vivis Pini maritimæ, Lot-et-Garonne Galliae.

101. *Sphaerella callistea* Syd., Ann. Mycol. VII (1909) p. 439, Mycotheca germanica, fasc. XVI-XVII, num. 785. — Maculis amphigenis valde conspicuis, irregularibus, præcipue apicem foliorum occupantibus, linea obscuriore cinctis, flavo-brunneis; peritheciis epiphyllis plus vel minus dense gregariis, depresso globosis, 80-140 μ . diam., atris, membranaceis, diutius tectis, medio pertusis; ascis apophysatis, oblongo-clavatis, apice rotundatis, sessilibus v. subsessilibus, 50-90 \times 16-20, octosporis; sporidiis congregatis v. distichis, ellipsoideis, utrinque obtusis; medio v. prope medium constricto-1-septatis, hyalinis; strato mucoso hyalino tenui cinctis, 18-22 \times 9-12, loculo altero sæpe paullo majore.

Hab. ad folia viva Osmundæ regalis pr. Müritz Germanie (Sydow).

102. *Sphaerella Asplenii* Awd. - Syll. I, pag. 533 - var. *Aspidii* v. 3810 Höhn. in litt., in Rehm, Ascom. Exsicc., fasc. 43, num. 1809 et Ann. Mycol. VII (1909) pag. 136. — Sporidiis 12-13 \times 2-3; ascis 32-36 \times 7-8; peritheciis 90-100 μ .

Hab. in frondibus siccis vetustis Aspidii Filix-mas, Schladning Styriæ sup. (HÖHNEL).

103. *Sphaerella aquilina* (Fr.) Auersw. - Syll. I, pag. 532 - f. *Aspi-* 3811

diorum Sacc., Ann. Mycol. VII (1909) p. 435. — Peritheciis hinc inde maculiformiter gregariis, epiphyllis, 70-80 μ . diam.; ascis 32-34 \times 6-7; sporidiis 9 \times 2,5.

Hab. in frondibus languidis Aspidii sp. ad Tiefensee pr. Werneuchen (H. Sydow). — Conferenda cum *Sph. Asplenii* v. *Aspidii* v. Höhn.

104. *Sphaerella Ascophylli* (Cotton) Sacc. et Trott., *Mycosphaerella* 3812 *Ascophylli* Cotton, Trans. Brit. Mycol. Soc. 1908 v. III (1909) p. 95, tab. IV. — Peritheciis minutissimis, piriformibus, nigris, sparsis, immersis, 100-130 \times 80-90, ostiole minuto non prominenti; ascis paucis, oblongis, saepe curvulis, apice incrassato-tunicatis, octosporis, 50-60 \times 18-20, a paraphysatis; sporidiis distichis, fusoides, 1-septatis, non constrictis, 18-21 \times 4-5, hyalinis.

Hab. in receptaculis vivis *Ascophylli nodosi* (algæ) in mari ad littora Britanniae, ins. Faeroe, Heligoland Sueciae. — Mycelium intra matricis receptacula diffusum.

Sphaerellæ species non satis notæ, memoratae in Syll. vol. XX p. 830, sunt: *Sphaerella Alchemillæ* Kalchbr. — *Sph. chalcographa* Kalchbr. — *Sph. minuta* Auersw.

EPICYMATIA Fuck. — Syll. I p. 570, XI p. 303, XVI p. 485.

1. *Epicymatia Balani* Winter apud Hariot in Journ. de Bot. I (1887) 3813 p. 233. — Peritheciis gregariis, immersis, demum vertice tantum emergentibus, subglobosis, poro simplici pertusis, membranaceo-coriaceis, atris, 120-140 μ . diam.; ascis clavatis, deorsum substipitatis, vertice late rotundatis, mox diffluentibus, octosporis, 60 \times 17-19; sporidii subdistichis, oblongo-subclavatis, utrinque attenuatis, sed rotundatis, medio 1-septatis et vix constrictis, hyalinis, 19-23 \times 6-7.

Hab. in thallo *Brachytrichiæ Balani* (algæ), in mari ad Saint Malo Galliae (BORNET).

REHMIELLOPSIS Bubák et Kabát, Naturw. Ztschr. f. Land-u. Forstwirtsch. (1910) pag. 320 (Etym. *Rehmiella* et *opsis* facies). — Stromata nulla; perithecia subepidermica, immersa, globoso-conica, apice erumpentia, coriacea, contextu pseudoparenchymatico, nigro-fusco; ascis 10-24-sporis, fusoideis v. clavatis, breve stipitatis, a paraphysatis; sporidiis ellipsoideis v. oblongis, uniseptatis, utrinque rotundatis, hyalinis. — A *Mycosphaerella* Johans. em. Sacc. — Syll. IX, p. 659 — ægre distinguendum genus.

1. *Rehmiellopsis bohemica* Bubák et Kabát, l. c. fig. 3-4. — Peri. 3814
theeciis globoso-conoideis, apice conico protuberantibus, 150-200 μ .
latis, nigris, opacis, crasse tunicatis, contextu pseudoparenchymatico,
nigro-fusco; ascis aparaphysatis, polysporis (10-24), clavatis
v. fusoideis, 50-90 μ . longis, 20-24 latis, rectis v. parum curvatis,
apice rotundato-attenuatis, basi paulatim attenuatis, brevi-stipitatis,
tunica tenui, facile in aqua intumescente; sporidiis ellipsoideis
v. oblongis, 13-21 \times 5-6, hyalinis, uniseptatis, utrinque rotundatis,
altera cellula semper angustiore.

Hab. in foliis *Abietis albae*, Turnau, Bohemia. — *Socia Phoma bohemica* Bub. et Kab.

STIGMATEA Fr. — Syll. I p. 541, IX p. 660, XIV p. 534, XVI
p. 478, XVII p. 649.

1. *Stigmataea Mespili* Sorauer, Monatschr. d. Ver. Beförd. d. Gartenb. 3815
Preuss. (Jan. 1878) et Pflanzenkr. 2 Auf. II, p. 372. — Peritheciis innato-superficialibus, sparsis v. in soros minutos confertis,
globosis v. globoso-depressis, atro-brunneis, 100-175 μ . diam., ostiolo vix perspicuo; ascis clavatis, 62-110 \times 12-25; sporidiis distichis,
ovoideis v. breve clavulatis obtusis, constricto-1-septatis, hyalinis, 18-25 \times 6-7,5; paraphysibus filiformibus v. clavulatis.

Hab. ad folia viva, quæ infuscantur et pereunt Piri, Cydoniæ, Cotoneasteris et Mespili in Germania, Helvetia, Italia, Amer. bor. — Status pycnidicus vel potius conidicus est *Entomosporium maculatum* Lév.

2. *Stigmataea laurincola* Rehm, Ascom. exs. fasc. 44, n. 1847, Ann. 3816
Mycol. VII (1909) p. 404. — Peritheciis hypophyllis, gregariis,
primitus minutissime papillulatis, 100 μ . diam., contextu tenui
parenchymatico, flavo-fusco; ascis subclavatis, teneris, apice rotundatis, 90-100 \times 15-18; sporidiis oblongis, rectis, utrinque rotundatis, medio 1-septatis leniterque constrictis, hyalinis, intus sæpe
minutissime granulosis, 20-24 \times 7-8, distichis; paraphysibus filiformibus, septatis, 4-8 μ . cr.

Hab. ad folia putrescentia *Lauri nobilis*, pr. Ziebigk, Dessau Germaniæ (STARITZ).

3. *Stigmataea plantaginicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 3817
(1909) pag. 358. — Maculis nullis v. obsoletissimis plus minusve
diffusis lutescenti-pallescentibus; peritheciis epiphyllis-superficie-
libus lenticularibus, 60-80 μ . diam., obsolete impresso-ostiolatis, hy-
phis marginalibus parcis radiantibus septulatis gracilibus 4 μ . cr.

olivaceis ornatis; ascis ovoideis $28 \times 10-14$, aparaphysatis, octosporis; sporidiis conglobatis, ellipsoideo-subclavulatis, didymis, hyalinis, $10-11 \times 4$, loculis subæqualibus grosse 1-guttulatis.

Hab. ad folia viva *Plantaginis myosuri* in pratis circa Ensenada Rep. Argentina America austr.

4. **Stigmata quercina** Rehm, in Krieger; Ann. Mycol. IV (1906) 3818 p. 40. — Peritheciis in epiphylo haud mutato gregarie innatis ab eoque paullulum protuberante tectis, denum denudatis, globulosis, excipulo molli, membranaceo, fuscidulo, poro pertusis, sicco nigrescentibus, glabris $150-180 \mu$. diam.; ascis cylindraceis, $70-75 \times 8-9$, octosporis; sporidiis ellipsoideis, medio septatis, haud constrictis, hyalinis, $9-10 \times 4.5-5$, monostichis; paraphyses desunt.

Hab. ad folia *Quercus* prope Königstein a/E. — *Sphaerellæ Esculi* Cocc. et Mor. affinis.

5. **Stigmata Hepaticarum** Patouill., Bull. trim. Soc. Myc. de France, 3819 vol. XXI (1905) pag. 121. — Peritheciis solitariis, superficialibus $300-500 \mu$. diam., nigris, glabris et æqualibus, coriaceo-membranaceis, subglobosis v. conoideis, apice truncatis, depressis et ostiolatis; ascis cylindraceis, stipitatis 80×15 , octosporis; paraphysisibus copiosis, linearibus, valde ramosis; sporidiis hyalinis, distichis, uniseptatis, medio constrictulatis, loculis inæqualibus, multiguttulatis, $18-22 \times 7-8$; pycnidii (*Pyrenophaeta Hepaticarum*) sparsis, nigris, opacis, ventricosis $75-120 \mu$. diam., collo 60×30 apice setuloso præditis; sporulis hyalinis, ovoideis $4-5 \times 3$ biguttulatis, copiosis conglutinatis, cirrum cylindraceum efformantibus; spermogoniis globulosis 60μ . diam., nigris, apice ostiolatis; sporulis hyalinis, cylindraceis, rectis v. curvulis 3×1 .

Hab. ad thallum *Lunulariæ* sp., Algeria Africa bor.

6. **Stigmata Velenovskyi** Bubák, Ann. Mycol. IV (1906) p. 109. — 3820 Peritheciis superficialibus, globoso-lenticularibus, $60-90 \mu$. diam., atro-brunneis, sparsis v. in soros minutos confertis, hyphis mycelii ramosis, castaneis, crebro septatis, adpresse radiantibus cinctis, ostiolo centrali 20μ . diam., contextu parenchymatico, crassiusculo; ascis ovoideis, $22-35 \times 15-17$, apice late rotundatis, in-crassatis, brevissime pedicellatis, octosporis; sporidiis oblongis, $11-15.5 \times 4.5-5.5$, utrinque rotundatis, inæqualiter bicellularibus, hyalinis, ad septum constrictis, 2-guttatis, cellula superiori pro more paullo latiore.

Hab. ad folia *Hypni ochracei*, Weisswassergrund, Riesengebirge Bohemiae (VELENOVSKY).

VENTURIA De Not. — Syll. I p. 586, IX p. 687, XI p. 305, XIV p. 541, XVI p. 489, XVII p. 650.

I. *Euventuria*: sporidia hyalina, achroa.

1. **Venturia sphærelloidea** von Höhn., Fragm. Mykol. VIII (1909) 3821 p. 47. — Peritheciis gregariis subcutaneis, e basi ovoidea globulosis, 100-120 μ . lat., 140 μ . alt., contextu tenui brunneo præditis, circa ostiolum setulis 1-3 brunneis, continuis, obtusis, 10 \times 4 usque ad 60 \times 6-7 ornatis, basi hyphulis pallidis 2-3 μ . cr., repertibus cinctis; ascis a paraphysatis, fusoideo-clavulatis, sessiliis, octosporis, tenui-tunicatis, 32-44 \times 5-8; sporidiis mono-distichis, fusoideis, hyalinis, bicellularibus, 4-guttulatis, utrinque acutulis, medio non constrictis, 10-12 \times 3-4, cellulis æqualibus.

Hab. in caulinis emortuis Impatientis Nolitangere, Sonntagsberg Austræ inf. (P. STRASSE).

2. **Venturia Missionum** Speg., An. Mus. Nac. Buenos Aires t. XVII 3822 (1908) p. 121. — Superficialis, dense gregaria, minutissima, nigra; peritheciis globosis v. subdepressis 90-100 μ . diam., ostiolo minuto perforatis, setulis laxis acutis, 30-50 \times 8-6, non bulbosis adspersis, contextu coriacello indistincto, atro; ascis clavulatis, a paraphysatis, apice rotundatis, deorsum cuneatis breviterque noduloso-pedicellatis, 35-40 \times 8-9, octosporis; sporidiis distichis, ellipsoideis, utrinque obtusiusculis, 10 \times 4, 1-septatis, vix constrictis, hyalinis, 2-guttulatis.

Hab. ad ramulos languidos v. emortuos Ilicis paraguaiensis (*Yerba*) in dumetis circa S. Pedro, Misiones, Argentina.

3. **Venturia pirina** Aderhold Landw. Jahrb. XXV (1896) p. 875, Vent. 3823 ditricha f. *Piri* Bref. Unters. X, t. VII, f. 59, *Sphaerella sentina* (Fr.) Sacc. Syll. I, pag. 482, non Fuck. — Peritheciis conferatis v. gregariis, sæpius hypophyllis, erumpentibus, globosis, 120-160 μ . diam., breviter v. longiuscule papillatis, setulis paucis circa ostiolum coronatis, deorsum sæpius calvis; ascis 8-sporis, saccatis, infra medium incrassatis, 40-70 μ . longis; sporidiis infra distichis, sursum monostichis, oblongatis, flavo-viridibus, 14-20 \times 5-8, inæqualiter bicellularibus, cellula super. crassiore et duplo longiore, rarius loculis subæqualibus.

Hab. in foliis Piri communis in Germania, Helvetia, Fennia, Britannia, Italia, Gallia, Amer. bor. — Status conidicus: *Fusciplodium pirinum* (Lib.) Fuck. — Syll. IV, p. 346. — Conidio-

phoris erectis, simplicibus, plerumque continuis, brunneis, nodulosis, 20-60 saepius 40 μ . long.; conidiis fusoideis v. navicularibus, continuis, dein 1-septatis, 20-25 \times 5-8.

4. *Venturia Usteriana* Speg., Fungi Paul., Rev. Mus. La Plata t. XV 3824 (1908) p. 21. — Maculis amphigenis indeterminatis pallescentibus; peritheciis hinc inde gregatim erumpentibus, saepius hypophyllis, udis globosis, siccis corrugato-collapsis, 60-100 μ . diam., astomis?, membranaceo-coriacellis, contextu dense minuteque parenchymatico fuligineo donatis, setulis divaricatis simplicibus 2-3-cellularibus acutiusculis, 20-40 \times 4-5, fumosis adspersis; ascis e fusoideo cylindraceis, antice subtruncato-rotundatis postice breviter cuneatis, pedicello brevissimo crassoque suffultis, 50-60 \times 7-9, pseudoparaphysibus paucis circumdati; sporidiis octonis oblique distichis 14-15 \times 3-3,5, apice supero obtuso, infero subacutiore, medio non constrictis, hyalinis.

Hab. ad folia viva Compositæ cujusdam in Horto botanico Sao Paulo Brasiliæ (USTERI). — Cum peritheciis ascophoros adsunt pycnidia nonnulla simillima, sporuligera, sporulis ellipsoideis utrinque acutiusculis 3-5 \times 1,5 minute biguttulatis, hyalinis.

5. *Venturia pellita* Hazsl., Sphær. Hungar. p. 127, t. VIII, f. 33 (1892). 3825 — Peritheciis globosis, minutis, gregariis, totam superficiem caulum occupantibus, excepto ostiolo setis nigris septatis tectis; ascis clavatis, basim versus æqualiter attenuatis in infima tertia parte vacuis, aparaphysatis; sporidiis uniseriatis, cuneiformibus, 1-septatis, loculo super. subgloboso, inferiori cylindraceo, rarius cylindraceis, 14-16 \times 4, hyalinis.

Hab. in caule Cardui acanthoidis ad radices Tatrae Hungariae.

6. *Venturia Bellotæ* Speg., Fungi Chilenses (1910) p. 50. — Peritheciis hypophyllis laxe pauci-gregariis (3-10) superficialibus subglobosis, atris, submembranaceis, 90-110 μ . diam., setulis 8-10 nigris opacis, 50-60 \times 4-5 hirtis; ascis sublanceolatis aparaphysatis subsessilibus, 30 \times 4, octosporis; sporidiis cylindraceo-subfusoideis parvis ad septum medium non constrictis, 9-10 \times 2-2,5.

Hab. in foliis siccis dejectis Cryptocaryæ Bellotæ in silvis Cerro Caracol de Concepcion, Chile Amer. austr.

7. *Venturia Puyæ* Speg., Fungi Chilenses (1910) p. 51, cum icon. — 3827 Maculis nullis; peritheciis pusillis sparsis v. laxe gregariis, globosis, dense setuliferis, atris, 100-120 μ . diam., setulis 10-20, 40-80 \times 6-10; ascis subcylindraceis brevissime pedicellatis, aparaphysatis, octo-

sporis, 50-55 \times 7-8; sporidiis ellipsoideis, ad septum non constrictis hyalinis, 9-12 \times 4-5.

Hab. in foliis emortuis subputrescentibus Puya cæruleæ, Cerro San Cristobal de Santjago, Chile Amer. austr.

8. **Venturia corralensis** Speg., Fungi Chilenses (1910) p. 51. — Ma 3828 culis nullis; peritheciis sparsis superficialibus, atris, sublenticularibus, 90-120 μ . diam., margine setulis 5-7 atris, opacis radiantibus, 60-70 \times 5-7 ornatis; ascis sporidiisque desideratis.

Hab. in foliis emortuis siccis Uncinæ erinaceæ, Bahia de Corral Chile Amer. austr.

9. **Venturia Hariotiana** Speg., Fungi Paul., Rev. Mus. La Plata t. XV 3829 (1908) p. 20. — Maculis amphigenis majusculis impressis, 5-15 mm. diam., margine acute elevatis, callosis, fuscouscentibus, eximie limitatis, primo sordide pallideque fulvellis, serius albido-cinere-scentibus; peritheciis saepe circinantibus numerosis parvulis 100-120 μ . diam., globoso-depressis, subastomis v. minute fimbriato-ostiolatis, setulis patulis minutis 20-30 \times 4-5 fuligineis, uni-cellularibus densiuscule vestitis, basi hyphis repentibus radiantibusque concoloribus 50-100 \times 6, septulatis cinctis, coriacellis, contextu indistincto; ascis e cylindraceo subfusoideis 60 \times 10, antice subtruncato-rotundatis, postice brevissime noduloseque stipitatis, apaphysatis, octosporis; sporidiis oblique distichis utrinque acutiusculis, 15-16 \times 3-4, uniseptatis, ad septum constrictulis, loculis minute bicutulatis, hyalinis.

Hab. ad folia arida subputrescentia Oncidii cujusdam, Ipiranga Moça Brasilia (USTERI). — Species *Trichosphaerice Hariotianæ* Karst. valde affinis; an ejusdem forma juvenilis?

II. *Chromoventuria*: sporidia colorata.

10. **Venturia austro-germanica** Rehm, Oesterr. bot. Zeitschr. L VI 3830 (1906) p. 295 et Ann. Mycol. V (1907) p. 538. — Peritheciis dispersis, sessilibus, globulosis, poro minutissimo pertusis, atris, membranaceis c. 150 μ . diam., setis numerosis, sparsis, rectis, acutatis, subfuscis 100 \times 4-5 ubique obsessis; ascis fusiformibus vel subclavatis, sessilibus, 60-70 \times 15, 8-sporis; sporidiis oblongo-fusiformibus, utrinque rotundatis, medio septatis, vix constrictis, cinereo-fuscis, 20-24 \times 7-8, distichis; paraphysibus paucis, filiformibus, 2 μ . cr.

Hab. ad folia sicca Salicis in jugo Schrofenpass inter Tiro-

liam et Algoviam bav. 1750 m. (Dr. REHM). — Affinis *Venturiae Niesslii*, sed sporidia æquicellularia, colorata.

11. *Venturia Frangulæ* Krieg., Ann. Mycol. VII (1909) p. 542, Krieg., 3831

Fungi saxon. n. 2068. — Peritheciis plerumque hypophyllis, confertis, globosis, 60-80 μ . diam., circa ostiolum setulis 22-30 \times 3-6 præditis; ascis cylindrico-ovoideis, sessilibus v. brevissime pendulatis, octosporis, 34-45 \times 6-10; sporidiis distichis, ellipsoideis v. ovoideis, septatis, griseo-fumosis, 7-10 \times 2-4, paraphysibus paucis.

Hab. in foliis putrescentibus *Frangulæ Alni* prope Könnigstein Germania.

12. *Venturia Antherici* Hollós, Ann. Mus. Nat. Hungar. VIII (1910) 3832

p. 9. — Peritheciis seriatim dispositis, erumpentibus e basi globosa conicis, 140-160 μ . diam., contextu celluloso, apice setis rigidis, 100-140 \times 5, fusco-atris obsitis; ascis clavatis, brevissime stipitatis, 75-80 \times 10-12, octosporis, filiformi-paraphysatis; sporidiis distichis, oblongo-ellipsoideis, medio 1-septatis, constrictis, 4-guttulatis, dilute olivaceis, 16-18 \times 4-5.

Hab. in foliis siccis *Antherici Liliaginæ* prope Nagy-Körös Hungariæ.

COLEROA Fr. ut subg. (1849) em. Rabenh. Herb. Mycol. n. 1456 (1850), Winter Krypt. Flora, Pilze II, p. 198 (Etym. *colera* oves breviter lanatæ). — A gen. *Venturia* distinguitur imprimis peritheciis ab initio superficialibus, semper biogenis. — Plures species *Venturiae* in Syll. descriptæ ad hoc genus transferendæ sunt. Cfr. Wint. l. c.

1. *Coleroa spinarum* v. Höhn., Ann. Naturhist. Hofmus. Wien, XX 3833

Heft 4 (1905) pag. 2 (extr.). — Peritheciis sparsis v. cæspitosis, superficialibus, nigris, excipulo tenui, globosis, 120-220 μ . diam., ostiolo obsoleto, fragilibus, extus setulis copiosis, nigris, rigidis, acutis, opacis, simplicibus, 150 \times 5-6, conspersis; nucleo carneo; ascis a paraphysatis, clavatis, subcarneis, tenuibus, 60-64 \times 9-10; sporidiis octonis, 2-3-stichis, bicellularibus, plerumque non constrictis, hyalinis, late fusoideis, utrinque acutis, 12-14 \times 4-5, intus granulosis.

Hab. ad spinas *Astragali* sp. pr. Erdschias-Dagh Asiæ minoris (A. PENTHER et E. ZEDERBAUER).

2. *Coleroa ventrioides* Speschn., Die Pilzparasiten d. Teestrauches 3834

(1907) p. 19, tab. III, fig. 14-19. — Peritheciis gregariis, subglobosis, cupuliformibus, ochraceis, primo epidermide leviter tectis, dein epiphyllis, subsuperficialibus, 100-130 μ . lat., 50-80 μ . altis,

setulis flexuosis, septatis, fuligineis, 50-60 \times 5-6, vestitis; ascis clavatis, 30-40 \times 8-10, aparaphysatis, octosporis; sporidiis oblongo-ovoideis, dilutissime chlorinis, 14 \times 8.

Hab. in maculis brunneolis indistinctis foliorum *Theæ si-*
nensis pr. Batum Caucasi.

3. **Coleroa Elasticæ** Koord., Botan. Untersuch. (1907) p. 186, f. 17 I 3885

— Peritheciis sparsis, superficialibus, amphigenis v. corticolis, im-
primis hypophyllis, coriaceis, atris, globosis, plerumque basi longe
setulosis, apice ostiolo orbiculari pertusis, 90-110 μ . diam.; ascis
clavatis, apice rotundatis, 8-sporis, 35 \times 12 apice haud incrassatis,
aparaphysatis; sporidiis biseriatis, ovoideo-fusiformibus, medio 1-
septatis, non constrictis, utrinque rotundatis, pallide olivaceis, 7-
10 \times 2,5-3; setulis 200-390 μ . longis, atris, apice acuminatissimis,
rectis v. curvulis.

Hab. in foliis emortuis et in cortice ramulorum *Fici elas-*
ticæ prope Loano, Purworedjo prov. Kedu insula Java (KOOR-
DERS). — *Venturiæ Elasticæ* Pass. proxima.

- DIDYMELLA** Sacc. — Syll. I p. 545, IX p. 661, XI p. 301, XIV
p. 535, XVI p. 479, XVII p. 653.

1. **Didymella Adonidis** Moesz, Gomb. Budapest I in Bot. Közlem. (1909) 3886

p. 8, t. II, f. 2 a-c. — Peritheciis sparsis v. subgregariis, epider-
mide tectis, dein erumpentibus, minutis, atris, epapillatis, 66-133
 μ . diam., contextu parenchymatico, fuligineo; ascis clavatis, stipi-
tatis, 50-66 \times 12-18, octosporis, paraphysibus filiformibus obvalla-
tis; sporidiis subtristichis, oblongo-ellipsoideis, rectis vel leniter
curvatis, 19-26,5 \times 3-4,5, hyalinis, uniseptatis, non constrictis mul-
tiguttulatis.

Hab. in petiolis siccis *Adonidis vernalis*, prope Budapest
Hungaria.

2. **Didymella Alyssi** Hollós, Ann. Mus. Nat. Hungar. V (1907) p. 47. 3887

— Peritheciis gregariis sparsisve, erumpentibus, globosis, ostioli-
atis, nigris, nitidulis, 280-350 μ . diam.; ascis clavatis, apice rotun-
datis et incrassatis, stipitatis, octosporis, 90-100 \times 14-16, filiformi-
paraphysatis; sporidiis distichis v. oblique monostichis, oblongis,
apice leniter attenuatis, rectis v. curvulis, medio 1-septatis, non
v. constrictis, interdum inaequalibus, 4- v. pluriguttulatis, hyalinis,
denique luteolis, 26-32 \times 7-8.

Hab. in caulinibus siccis *Alyssi tortuosi* prope Kecskemét
Hungariæ.

3. **Didymella Delphinii** Earle, Bull. of the N. York Bot. Gard. (1904) 5838 p. 293. — Peritheciis lâte sparsis, in areis amplis dealbatis innatis, demum partim expositis, nigris, subsphæroideis, prominulis, non collabentibus, 250-300 μ . diam., ostiolo minute papillato; ascis clavatis, breviter stipitatis, 80-90 \times 12-14, parce et obsolete filiformi-paraphysatis; sporidiis distichis, hyalinis, anguste ovoideis v. subellipsoideis, subinæqualiter 1-septatis, constrictis, cellula latiore sæpe acutata, minore obtusa, 20-25 \times 7-8.

Hab. in caulinis emortuis *Delphinii* sp., Ormsby Co. Nevada Amer. bor. (C. F. BAKER).

4. **Didymella obscura** Rehm, Ascom. exsicc. fasc. 46, n. 1887 et Ann. 3839 Mycol. (1910) p. 300. — Peritheciis gregariis, innatis, sub epidermide caulem ambiente late denigrata nidulantibus, demum fere sessilibus, globulosis, minutissime papillulatis, nigris, ad basim hyphis abeuntibus longis, constricto-septatis, fuscis, 4-7 μ . cr. obsolescens, 0,1-0,15 mm. latis, fusce membranaceo-contextis; ascis oblongis, sessilibus, 45-48 \times 12, octosporis; sporidiis ellipsoideis, medio septatis constrictisque, utraque cellula biguttulata, hyalinis, demum dilute flavescentibus, 12-14 \times 4-6, distichis; paraphysibus ramulosis.

Hab. ad caules siccis *Meliloti* albæ prope Königstein a. E. Saxoniae (KRIEGER).

5. **Didymella Coriariae** Speg., Fungi Chilenses (1910) p. 60. — Ma. 3840 culis nullis; peritheciis parvis subglobosis, submembranaceis, sparsis v. pauci-gregariis, cortice insidentibus, epidermide velatis, vix papillato-ostiolatis, 120-150 μ . diam.; ascis clavatis breviter pedicellatis paraphysatis, octosporis, 100 \times 15-16; sporidiis 1-septato-constrictulis, loculis subæqualibus grosse biguttulatis, 20-22 \times 6-7.

Hab. copiose in ramis siccis *Coriariae ruscifoliae*, Cerro Caracol de Concepcion Chile Amer. austr.

6. **Didymella Passifloræ** v. Höhnel, Fragm. z. Mykol. in Sitzb. k. Ak. 3841 d. Wiss. Wien Bd. CXVI, Abt. I (1907) p. 123. — Peritheciis crebro gregariis, hypophyllis, areis vix cinerescentibus insertis, nigris, punctiformibus, 50-65 μ . diam., ovato-globulosis, papilla latiuscula; contextu brunneo celluloso; ascis parce crassiuscule paraphysatis, paucis, crasse clavatis, sæpe curvulis, sessilibus, 28-30 \times 10; sporidiis octonis, 2-3-stichis, hyalinis, bicellularibus, oblongo-cuneatis, 8-10 \times 2-2,5, cellula superiore plerumque paullulo crassiore et breviore.

Hab. in foliis *Passifloræ* sp. cultæ, Upalu in ins. Samoa Polynesia (Doct. RECHINGER).

7. **Didymella Eryngii** Moesz, Gomb. Budapest I in Bot. Közlem. (1909) 3842 pag. 8, t. II, f. 4. — Peritheciis subgregariis, epidermide tectis, dein erumpentibus, nigris, globosis v. depresso-globosis, papillatis, 140-360 μ . diam., ostiolo 43-57 μ . diam., contextu dense parenchymatico, olivaceo-fuligineo, apicem versus nigrescente; ascis cylindraceo-clavatis, breviter stipitatis, 133-167 \times 17, octosporis, paraphysibus filiformibus obvallatis; sporidiis distichis, oblongis, inaequilateralibus, 33-43 \times 5-6,5, hyalinis, uniseptatis, ad septum lenissime constrictis, multiguttulatis.

Hab. in caule emortuo *Eryngii campestris* prope Budapest, Hungaria.

8. **Didymella Fruticosæ** v. Höhnel, Fragm. z. Mykol., Sitzb. k. Ak. 3843 d. Wiss. Wien, Bd. CXVI, Abt. I (1907) pag. 618. — Foliicola; maculis inaequaliter circularibus v. oblongis, amphigenis, 1-2 mm. lat., purpureo-brunneis, margine crassiusculo nigro; peritheciis hypophyllis, innatis, leviter prominulis, nigris, duriusculis, 100-140 μ . diam.; contextu olivaceo-nigricanti; ascis crasse clavatis, parce filiformi-paraphysatis, octosporis, 56-75 \times 16-20, breve stipitatis, tunica crassiuscula; sporidiis 2-3-seriatis, dilute chlorinis, oblongo-clavatis, bicellularibus, minute pluriguttulatis, 20-26 \times 6-6,5, medio non constrictis, cellula sup. paullulo latiore et breviore.

Hab. in foliis vivis *Bupleuri fruticosi* prope Bastia Corsicæ, frequens.

9. **Didymella Tupæ** Speg., Fungi Chilenses (1910) p. 60, cum icon. 3844 — Peritheciis laxe gregariis, lenticularibus, minute papillato-ostiolatis, epidermide velatis nigris, glabris, membranaceo-coriacellis, 120 μ . diam.; ascis subcylindraceis brevissime pedicellatis paraphysatis, octosporis, 100-110 \times 16-18 sporidiis distichis, elliptico-biconoideis mediocribus saepius per grosse biguttulatis ad septum constrictulis, hyalinis v. obsolete fumosis 22-24 \times 7-8.

Hab. in pedunculis emortuis *Lobeliae Tupæ* prope Ciudad de Valdivia, Chile Amer. austr.

10. **Didymella Senecionis** Hollós, Ann. Mus. Nat. Hung. VI (1908) 3845 p. 529. — Peritheciis seriatim dispositis, erumpentibus, hemisphaericis, glabris, atris, membranaceo-coriaceis, papillatis, 300-350 μ . diam.; ascis clavatis, breviter pedicellatis, 110-120 \times 10-12 octosporis; paraphysibus capiosis, filiformibus, 1 μ . cr.; sporidiis oblique monostichis, medio 1-septatis, constrictis, utrinque attenuatis, utraque cellula 2 guttulas oleosas magnas includente, hyalinis, 20-24 \times 6-7.

Hab. in caulis siccis Senecionis paludosi prope Kecske-mét Hungariæ.

11. **Didymella Cocconiae** Raciborski, Bull. Ac. Sc. Cracovie (1909) 3846 p. 390. — Peritheciis in soros convexos hinc inde collectis, 0,4-0,6 mm. diam., ostiolo punctiformi non prominulo præditis; nucleo albo, contextu nigro; ascis filiformi-paraphysatis, tereti-fusoides, copiosis, apice rotundatis, brevibus 38-46 × 11-13, octosporis; sporidiis bicellularibus, hyalinis, 12-15 × 4, ovato-fusoideis, distichis; paraphysibus ascos superantibus.

Hab. in stromate Cocconiae Placentæ ad folia Symploci spicatae, in M. Pangerango ins. Javae.

12. **Didymella sambucina** Rehm, Ann. Mycol. V (1907) p. 538. — 3847 Peritheciis in ligno decorticato, longe denigrato gregariis, subinnatis, hemisphærico-prominentibus, globulosis, atris, poro perspicuo pertusis, glabris, submembranaceis, 0,3-0,4 mm. diam.; ascis clavatis, 120 × 10, octosporis; sporidiis ellipsoideis, utrinque obtusis, medio subconstrictis, utrinque 2-guttulatis, hyalinis, 12-15 × 5 distichis; paraphysibus filiformibus.

Hab. ad ramum decorticatum Sambuci racemosæ in valle Venna montis Brenner, ca. 1900 m., Tirolie (Dr. REHM). — Affinis *D. acerinæ* sed sporidia minora, æquicellularia.

13. **Didymella Catalpæ** Hollós, Ann. Mus. Nat. Hung. V (1907) p. 47. 3848 — Peritheciis dense gregariis, erumpentibus, depresso-globosis, nigris, ostiolo brevi-papillato, 350-400 µ. diam.; ascis cylindraceis, brevi-stipitatis, octosporis, 100-120 × 10-12, filiformi-paraphysatis; sporidiis monostichis, ellipsoideis, medio 1-septatis, constrictis, minute bi-guttulatis, hyalinis, 17-21 × 8-10.

Hab. in ramis siccis decorticatis Catalpæ bignonioidis prope Kecskemét Hungariae.

14. **Didymella præclara** Rehm in Krieger, Ann. Mycol. IV (1906) 3849 p. 39. — Peritheciis dispersis, cortici immutato innatis, globulosis, collo minuto solum denigrato poroque pertuso hemisphærico-prominentibus, excipulo parenchymatico, molli, fuscidulo, 150 µ. diam.; ascis fusiformibus, apice rotundatis, sessilibus, saepè subcurvatis, 50-60 × 15, 8-sporis; sporidiis acute fusiformibus, plerumque rectis, medio septatis, haud constrictis, hyalinis, 30 × 5, tri-tetrastichis; paraphysibus tenerimis, filiformibus, septatis, 2,5 µ. diam., gelatinosis.

Hab. ad ramulos Vaccinii Myrtilli prope Königstein ad Albim Germaniae.

15. **Didymella ericina** (v. Tubeuf) Rehm, Ann. Mycol. V (1907) p. 538, 3850
Sphaeria ericina v. Tubeuf, Botan. Centralbl. XXI (1885) p. 15.
 — Peritheciis epiphyllis, in soros nigros sæpe magno numero collectis, globulosis, epidermide tectis, demum leniter prominentibus, 100-110 μ . diam., poro rotundo pertusis, non papillatis; contextu grosse pseudoparenchymatico, atro; ascis clavatis, sessilius, apice rotundatis, 40 \times 6, octosporis; sporidiis longe cylindraceis, utrinque rotundatis, medio septatis, non constrictis, hyalinis, 10 \times 2, distichis; paraphysibus tenuibus filiformibus.
Hab. in foliis emortuis Ericæ carneæ a Schluderbach ad Landro Tiroliæ merid. (Doct. v. TUBEUF).
16. **Didymella sachalinensis** Sacc., Ann. Mycol. VI (1908) p. 558. — 3851
 Peritheciis gregariis epidermide velatis, dein erumpentibus nudatisque, globoso-depressis, $1\frac{1}{2}$ - $2\frac{1}{2}$ mm. diam., nigris, brevissime papillatis, contextu membranaceo-subcoriaceo, denso, atro; ascis cylindraceis, brevi-stipitatis, apice rotundatis, filiformi-paraphysatis, 110-120 \times 10-11, octosporis; sporidiis monostichis oblongo-ovoideis, 18-20 \times 8-9, 1-septatis, brevissime constrictis, nubiloso-guttulatis, hyalinis, loculo superiore sæpe paullulo crassiore.
Hab. in caulibus morientibus v. emortuis Polygoni sachalinensis, Rigny sur Arroux, 1908 (FLAGEOLET).
17. **Didymella involucralis** (Pass.) Saccardo, Not. Myc. VI, Ann. Myc. III (1905) p. 511, *Metaspheeria involucralis* (Pass.) Sacc. — Syll. II, p. 172. — Ex spec. orig. in Rabebh. F. Eur. 1632 sunt asci 50-55 \times 6-8; sporidia 12-13 \times 3-3,2, ex hyalino dilutissime flaveola, medio constricto-1-septata, 4-guttulata nec 3-septata, ut auctor habet; hinc *Didymellæ* nec *Metaspheeria* species.
18. **Didymella Maxillariæ** Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 356. — Maculis nullis sed matrice tota arescente ac subcinerescente; peritheciis innatis subglobosis, 75-100 μ . diam., epidermide velatis sed prominulis, membranaceis, atris; ascis obclavulatis 45-50 \times 10-12, pseudoparaphysibus crassis torulosis obvalbatis; sporidiis ex ellipsoideo-fusoideis non v. leniter inaequilate-ratibus, medio non v. vix constrictis, 1-septatis, hyalinis, 14-15 \times 3-4.
Hab. ad folia Maxillariæ rufescens in silvis Misiones, Rep. Argentina Amer. austr.
19. **Didymella glumicola** Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV (1908) p. 21. — Peritheciis laxe gregariis areola diffusa albescente cinctis, epidermidem diu obtegentem perforantibus, hemisphaerico-lenticularibus 80-100 μ . diam., minute ostiolatis, membra-

naceis, glabris, atris, contextu eximie parenchymatico fuscescente; ascis antice obtusissime rotundatis crassiusculeque tunicatis, postice breviter cuneatis, modicissime pedicellatis, 55-60 \times 10, octosporis, paraphysibus filiformibus parum longioribus commixtis; sporidiis rectis v. leniter inæquilateralibus, superne obtusiusculis, inferne acutiusculis, 10-12 \times 2-2,5 primo continuis dein medio septatis, ad septum non constrictis, hyalinis.

Hab. ad glumellas submaturas Oryzae sativæ circa Sao Paulo Brasiliæ (A. USTERI).

20. **Didymella arthonispora** Rehm apud Fairm., Proc. Rochester Ac. 3855 of Sc. IV (1906) p. 221. — Peritheciis sessilibus, gregariis, hemisphaericis, vix papillatis, ostiolo perspicuo pertasis, nigris, basi hyphis nonnullis brevibus, fuscis obsessis, 100 μ . diam., siccis collabentibus, contextu parenchymatico fuscidulo; ascis oblongis, apice rotundatis, sessilibus, 35 \times 15, octosporis; sporidiis subclavatis, medio septatis, vix constrictis, hyalinis, 18-20 \times 6-7, distichis, grosse 2-guttatis, cellula superiore latiore.

Hab. ad corticem arboris indeterminate dejectæ in silvis Lyndonville Amer. bor. — *D. Stenocarpi* proxima videtur.

21. **Didymella Lettauiana** von Keissler, Centralbl. für Bakter. etc. 3856 II Abt. (1910) p. 211, fig. 2. — Peritheciis dispersis compresso-disciformibus, magnis, superficialibus, nigris, sub microscopio bruno-nigris, ostiolo subpapillato præditis, carbonaceis, 400-500 μ . d.; ascis cylindraceis, distincte stipitatis (in aqua turgescentibus et demum subsessilibus evadentibus) rectis v. curvulis, tenuiter tunicatis, 8-sporis, 110 \times 25, paraphysibus distincte filiformibus, denum probabiliter confluentibus; sporidiis subcuneiformibus, 1-septatis, loculo superiore subgloboso, inferiore tenuiore oblongo vel duplo longiore, hyalinis v. chlorino-hyalinis, subdistichis, 18-22 \times 7-8.

Hab. in thallo tenuissimo vix visibili lichenoso (Catillariæ chalybææ?) ad lapidem in M. Flossberg pr. Ilmenau Thuringiæ (Doct. G. LETTAU). — An *Pharcidiae* sp. observante auctore?

22. **Didymella Coarctata** Bouly de Lesdain, Bull. Soc. bot. France 3857 LIV [1907] 1908, p. 695. — Peritheciis minutis, nigris, levibus, parte tertia inferiori substrato infossis; ascis clavatis a paraphysatis; sporidiis octonis, 1-septatis, 12-21 \times 4-6.

Hab. in thallo Lecidex coarctatae pr. Versailles Gallie. — Gelatina hymenialis jodi ope flavescit.

23. **Didymella darluciphila** Speg., An. Mus. Nac. Buenos Aires t. XIX 3858 (1909) p. 357, cum icon. — Amphigena, hinc inde dense aggre-

gata, 0,5-2 mm. long., 250-500 μ . lat.; peritheciis dense constipatis e lenticulari conoideis, 100-130 μ . diam., minute papillulato-ostiolatis, nigris, glabris; ascis e cylindraceo lenissime subfusoideis v. subclavulatis, 50-75 \times 8-10, paraphysibus filiformibus vix longioribus parcis obvallatis; sporidiis e fusoideo clavulatis, subcurvulis, 12-18 \times 3 medio 1-septatis, hyalinis, biguttulatis v. non.

Hab. ad glomerulos *Darlucae australis* in foliis aridis *Andropogonis condensati* a *Puccinia andropogonica* infectis, prope Posadas nec non prope Basavilbaso Rep. Argentina Americæ austr. — An status ascophorus *Darlucae australis*?

24. *Didymella sphinctrinoides* (Zwackh) Berl. et Vogl. — Syll. IX, 3859 p. 671. — var. *Verrucariae* Zopf, Paras. Pilze der Flecht. p. 176, f. 68 (1897). — Peritheciis breviter piriformi-ellipsoideis, minutissimis, nigris, sparsis; ascis cylindraceis, 12-13 μ . cr., jodo non coloratis, copiose ramoso-paraphysatis, 4-6-sporis; sporidiis bilocularibus, 2-guttatis, oblongis, utrinque rotundatis, loculo sup. paullo crassiore, hyalinis, 18-20 \times 7-8.

Hab. in thallo *Verrucariae pachydermae*, St. Anton am Arlberg Bavariæ. — Var. *aspiciliicola* Zopf, l. c., pag. 176-178, fig. 69-72: a *Did. sphinctrinoide* differt ascis potius ovato-oblongis, nec cylindricis, multo parcius paraphysatis; sporidiis paullo angustioribus, leviter curvis, 18-21 \times 6,5-7,5. — In thallo *Aspicilia lavatae* v. *albicans*, St. Anton am Arlberg Bavariæ.

MASSARINULA Gen. de Lamarl. — Syll. XIV p. 356, XVI p. 483, XVII p. 658.

1. *Massarinula chilensis* Speg., Fungi Chilenses (1910) p. 61, cum 3860 icon. — Peritheciis sparsis cortice innatis, epidermide velatis, lenticularibus, coriaceis, nigris, 300-350 μ . diam.; ascis clavulatis breviter crasseque pedicellatis, paraphysatis, 300 \times 60, octosporis; sporidiis ellipsoideo-biconicis, loculo infero vix minore, primo strato mucoso crasso obovolutis dein nudis, 60-65 \times 20-22, hyalinis.

Hab. in ramis emortuis dejectis *Boldoæ fragrantis* prope Talcahuano, Chile Amer. austr.

APIOSPORA Sacc. — Syll. I p. 539, IX p. 659, XI p. 301, XIV p. 534, XVI p. 477, XVII p. 658.

1. *Apiospora Yerbæ* Speg., An. Mus. Nac. Buenos Aires t. XVII 3861 (1908) p. 121. — Corticola, subepidermica, laxe gregaria; perithe-

ciis minutis, 150 μ . diam., subcarbonaceis, glabris, lenticulari-hemisphaericis; ostiolo minuto carbonaceo; ascis cylindraceis breviter pedicellatis, aparaphysatis, apice truncato-rotundatis, 100-120 \times 8-10; contextu indistincto; sporidiis ovoideis bicellularibus, loculo inferiore, seu cauda, triplo minore, hyalinis, monostichis, 14 \times 5-6, prima ætate tunica mucosa tenui obvolutis; loculo sup. 2 guttato, infero uniguttulato.

Hab. ad ramulos languidos v. emortuos Ilicis paraguariensis (vulgo Yerba) Misiones Argentinæ.

2. **Apiospora controversa** Starb., Ascom. Schwed. Chaco-Cordill.-Exp., 3862

Arkiv f. Bot. Bd. V (1905) p. 22, fig. 17 a-c. — Peritheciis densissimis confertis, rarius nonnullis confluentibus, maculas irregulares formantibus, primitus epidermide plane tectis, denique poro pertuso erumpentibus, lenticularibus, atratis, c. 200-250 μ . diam.; ascis octosporis, oblongatis vel late fuscoideis, interdum clavulatis, superne obtusis, fere sessilibus, 65-70 \times 19-20; sporidiis distichis vel inordinatim conglobatis, plerumque ovoideo-piriformibus, rarissime ellipsoideis vel ellipsoideo-oblongatis, ad apicem angustiorum septatis, cellula majore globuloidea, minore conica, sepimento saepissime supra, interdum infra medium sito, endoplasmate grumoso, hyalinis, 15-19 \times 7,5-9; cellula globulosa, 9-11,5 \times 5-7; paraphysibus numeroris, filiformibus, ramosis, guttulatis, hyalinis.

Hab. in foliis vivis paullulum flavidо-decoloratis Pithecellobii sp. ad Gran Chaco Boliviæ. — Nulli speciei adhuc descriptæ affinis videtur; præsentim sporidiis peculiariter septatis prædistincta.

3. **Apiospora myrtincola** Rehm, Ann. Mycol. V (1907) pag. 528. — 3863

Peritheciis dispersis, cortice dealbato primitus tectis, dein semiglobosis, prominentibus, atris, minutissime papillulatis, globosis, contextu parenchymatico fusco, 0,1-0,15 mm. diam.; ascis clavatis, apice rotundatis, crasse tunicatis, 60-65 \times 10-12, 8-sporis; sporidiis ovoideis, infra medium septatis, haud constrictis, hyalinis, 12 \times 5-6, in superiore ascii parte 2-infra 1-stichis; paraphysibus filiformibus, 1,5 μ . cr., hyalinis.

Hab. in ramulo Myrtaceæ, Ipamanga pr. Sao Paulo Brasiliæ (USTERI). — Affinis *Ap. Rosenvingei* betulicolæ, sed sporidia paullo minora.

4. **Apiospora luzonensis** P. Henn., Hedwigia XLVII (1908) p. 256. — 3864

Peritheciis gregariis parallele seriatis, immersis culmine superficie elevantibus erumpentibusque, subglobosis, atris, 200 μ . circ.

diam.; ascis clavatis, obtuse rotundatis, 8-sporis, 90-100 \times 20-24; sporidiis subdistichis, oblonge clavatis, incurvo-attenuatis, 20-24 \times 8-10, hyalinis, tunicatis, prope basim 1-septatis, subconstrictis.

Hab. in culmis emortuis *Bambusa* sp., Luzon, prov. Bataan Ins. Philipp. (MERRILL).

5. *Apiospora chilensis* Speg., Fungi Chilenses (1910) pag. 36, cum 3865 icon. — Linearis nigra erumpens; peritheciis dense 1-5 mm. se-riatis, globosis, minutis, 200-250 μ . diam.; ascis subclavatis apa-physatis, 110-125 \times 20-22, octosporis; sporidiis elongato-subnavi-cularibus, majusculis, 36-38 \times 10-11, cellula appendiculari minima, hyalinis.

Hab. in culmis siccis *Chusquea* Cumingii, Corral, Val-divia, Concepcion, Valparaiso, Chile Amer. austr. — Verisimiliter *Sphaeria apiospora* huc pertinet sed descriptio Montagnei incerta.

MELANOPSAMMA Niessl — Syll. I p. 575, IX p. 682, XI p. 303, XIV p. 539, XVI p. 486, XVII p. 658.

1. *Melanopsamma Verbæ* Speg., An. Mus. Nac. Buenos Aires t. XVII 3866 (1908) p. 121. — Peritheciis ligno dealbato-subfuscato immersis, sparsis v. laxe gregariis, parte supera v. ostiolo papillulato, perforato tantum exertis, subglobosis, 200 μ . diam.; ascis clavulatis, filiformi-paraphysatis, apice obtusis, 80 \times 10, brevissime nodulosopedicellatis; sporidiis fusoideis leniter arcuatulis, utrinque acutiu-sculis, medio uniseptatis vix constrictis, hyalinis, 25-26 \times 4, disti-chis, loculis conoideis, minutissime biguttulatis.

Hab. ad trunco emortuo carioso *Ilicis paraguariensis* (*Yerba*), San Pedro, Misiones Argentinae.

2. *Melanopsamma* (*Hypopsamma*) *Ribis* Chenant. in Bull. Soc. Sc. 3867 nat. Ouest France (1910) p. 13, t. IV, f. 2. — Stromate irregu-lariter ellipsoideo nigrescente, ostiolis vix conspicuis muricatis, de-mum elongatis acutis, crassis aggregatis v. subsparsis punctato; peritheciis spheroideis, minutis, semper immersis, circ. 150-200 μ . diam.; ascis aparaphysatis, cylindraceis, utrinque attenuatis, 110-135 μ . longis, apice bifoveolatis; sporidiis ovatis oblongisve, recte v. oblique monostichis, hyalinis, 1-septatis, 2- v. pluriguttulatis, dein 2-3-septatis, non constrictis, hyalinis, loculis 2-guttulatis, 10-20 μ . long. et (ex icono) 6-10 μ . cr.

Hab. in ramis *Ribis Uva-crispæ*, Bagatelle, Monterelaxo Galliae. — Cum gen. *Melanopsamma* nil commune habet; auctor vero in litt. nuperius ut formam anomalam *Eutypæ* censem a quo

genere et ascis biformeolatis et sporidiis ovatis septatis abhorret.
Diagnosim retulimus sed verisimiliter de re miscellanea agitur.

3. *Melanopsamma Jaapiana* Kirschst., in Jaap Abh. bot. Ver. Prov. 3868
Brandenb. LII (1910) p. 138. — (Nomen nudum).

Hab. ad caudices vetustos Alni pro Triglitz in Germania.

4. *Melanopsamma herpotrichoides* Kirschst., Verh. bot. Ver. Bran- 3869
denb. XLVIII (1906) p. 49. — Peritheciis dense confertis, subiculo
brunneo (raro nullo) insertis, nigris, piriformibus, 200 µ. diam.,
tenui-membranaceis, in ostium breve nitidum productis; ascis
cylindraceis, sessilibus, tenuibus, apice truncatis, 80-90 × 3-4, octo-
sporis; sporidiis longe 1-seriatis, bicellularibus, hyalinis v. dilu-
tissime viridulis, ellipsoideis, utrinque tenuato-rotundatis, ad se-
ptum plus minus constrictis, 2-4-guttulatis, 7-10 × 3; paraphysibus
hyalinis filiformibus, ramosis.

Hab. in interiore corticis putridi Betulae dejecti, Rathenower
Stadtforst Borussiæ.

5. *Melanopsamma valdiviensis* Speg., Fungi Chilenses (1910) p. 59. — 3870
Maculis nullis; peritheciis sparsis v. laxe gregariis ad medium
usque ligno denudato infossis, ostio umboniformi crasso quan-
doque subpresso ornatis, carbonaceis, atris, glabris, 150-200 µ.
diam.; ascis subcylindraceis brevissime pedicellatis, densissime pa-
raphysatis, 100-110 × 15-18; sporidiis fusoideis submajusculis primo
grosse 6-guttulatis serius medio 1-septatis, constrictulis, hyalinis
v. subchlorinatis, 40-45 × 7-8.

Hab. ad trunco decorticatos Perseæ Lingue prope Ciudad
de Valdivia, Chile Amer. austr.

6. *Melanopsamma nitida* Kirschst., Verh. bot. Ver. Brandenb. XLVIII 3871
(1906) p. 50. — Peritheciis dense gregariis, nitidis, nigris, globo-
sis, glabris, perexiguis, oculo inermi vix conspicuis, tenuibus, fra-
gilis, papilla brevi obscuriore præditis; ascis cylindraceis v. te-
reti-clavatis, apice rotundatis, vix pedicellatis, octosporis, 50-60 ×
3-4; sporidiis oblongis, subclavatis, hyalinis, bicellularibus, intus
vacuis, 1-2-stichis, 6-8 × 2; paraphysibus parcis, filiformibus, hya-
linis, ascos multo superantibus.

Hab. ad caudices putres Pini silvestris, Rathenower Stadt-
forst Borussiæ.

7. *Melanopsamma hypoxyloides* v. Höhn., Fragm. z. Mykol. III, Sitzb. 3872
k. Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) p. 121. —
Peritheciis areis ligni nigricantibus insertis, superficialibus, pro
more crebro gregariis, hemisphaericis v. ovoideo-globosis, lata basi

adnatis, glabris, nigris, carbonaceis, nitidis, papilla nitidula v. obsoleta, saepe leviter concentrica sulcatalis, 900-1000 μ . diam.; ascis cylindraceis, paraphysibus copiosis excedentibus, 1 μ . cr. obvallatis, apice crassiusculis et rotundatis, in stipitem longiusculum sensim tenuatis, octosporis, 150-160 \times 6-7; sporidiis bicellularibus, hyalinis, fusoideis, utrinque acutis, medio non constrictis, rectis, 18-32 \times 3-3,5, plerumque 20-24 \times 3, distichis.

Hab. in ligno putrescenti in insulis Samoa Polynesiae (RECHINGER). — *Habitus quasi Hypoxylia.*

8. **Melanopsamma chilensis** Speg., Fungi Chilenses (1910) pag. 58, 3873 cum icon. — Peritheciis matrici denudata cinerescenti sparsis, sub-superficialibus, udis globosis, siccis cupulato-collabescientibus, sub-corneis, parvis, nigris, glabris, 250-400 μ . diam.; ascis cylindraceis brevissime pedicellatis denseque paraphysatis, 100-110 \times 10-12, octosporis; sporidiis oblique monostichis ellipsoideo-biconicis, 1-septatis, constrictis, hyalinis, mediocribus, 20 \times 8-9.

Hab. in ramis emortuis et siccis Proustiae pungentis, in colles prope Batuco Chile Amer. austr.

ERIOSPHÆRIA Sacc. — Syll. I p. 597, IX p. 696, XI p. 307, XVI p. 490, XVII p. 659.

1. **Eriosphæria erysiphoides** Rehm, Contr. myc. Fl. Hung., Novenyt. 3874 Közlemén. (1905) p. 1. — Peritheciis gregariis, maculas nigras formantibus, sessilibus, globosis, poro haud conspicuo pertusis, fuscidulis, siccis nigris; contextu parenchymatico fusco, setis plurimis rectis, acutis, fuscis, 45 \times 4-5, obsessis, 90-120 μ . diam.; ascis fusiformibus, sessilibus, 30 \times 4, 8-sporis oblongis, utrinque obtusis, rectis vel curvatulis, medio septatis, utraque cellula 1-guttulata, hyalinis, 7-9 \times 1,5, distichis; paraphysibus nullis.

Hab. in ligno Populi, Berencsfalu, prope Selmecbánya Hungariae (KMET). — *Sphaerite exili* Alb. et Schw. similis, quæ autem quoad ascos et sporidia plane ignota et quæ, teste Schröt., non est *Caelosphaeria exilis* (Fuck.) Sacc.

KIRSCHSTEINIA Syd. Ann. Mycol. IV (1906) p. 455 (Etym. a cl. W. KIRSCHSTEIN, mycolo borussico), *Bertiella* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) p. 51, non Sacc. — Perithecia discreta, superficialia, glabra, carbonacea, ovoideo-globosa, ostiolo brevi crasso. Asci fusoideo-clavati, polyspori, aparaphysati. Spo-

ridia ellipsoideo-oblonga, 2-4-guttulata, dein 1-septata, hyalina. — A genere *Bertia* præceteris ascis polysporis distinguitur.

1. **Kirschsteinia polyspora** (Kirschst.) Syd. l. c., *Bertiella polyspora* 8875 Kirschst., l. c. p. 51, cum icono. — Peritheciis superficialibus, nigris, rugosis, glabris, globoso-ovoideis, obtuse papillatis, $\frac{1}{4}$ - $\frac{1}{2}$ mm. cr., basi adnatis, hyphulisque brunneis septatis cinctis; ascis fusideo-clavatis, subsessilibus, 90 \times 20, polysporis; sporidiis ellipsoideo-oblongis, rectis v. curvulis, hyalinis, 2-4-guttulatis, dein 1-septatis, non constrictis, 9-12 \times 2-3; paraphysibus nullis.

Hab. in ramis decorticatis putrescentibus quercinis, Rathenower Stadtforst Borussiae.

VALETONIELLA v. Höhn. Fragm. Myk. IX (1909) p. 39 (Etym. a cl. THEOD. VALETON herbarii Buitenzorgensis directore). — Perithecia superficialia, membranacea, nigricantia, ostiolo circumcirca setis apice ramosis ornato. Ascii non v. obsolete paraphysati, octospori. Sporidia oblonga, hyalina, demum bicellularia. — Ab *Eriosphaeria* imprimis setis apice ramosis dignoscendum genus.

1. **Valetoniella crucipila** v. Höhn. l. c. p. 40. — Peritheciis gregariis, 8876 subglobosis, 180-220 μ . diam., papillatis, papilla obscuriore 50-70 \times 30-35, ostiolo 8-10 μ . diam.; contextu e cellulis polygoniis, 12-16 μ . diam., atro-brunneis formato; setulis 15-20, rigidulis, continuis, atro-brunneis, 44-70 \times 6-8, prope apicem in ramos subquaternos, 8 μ . cr., patentes divisis; ascis obsolete paraphysatis, clavatis, teneris, 30-36 \times 7-9; sporidiis distichis, ellipsoideo-oblongis, ad septum non constrictis, 8-9 \times 3, rarius 13 \times 4, tunica interdum leviter longitrorsum 3-4-striatula.

Hab. ad corticem Albizziæ moluccanae (?) in horto botanico Buitenzorg Javæ.

LIZONIELLA P. Henn. — Syll. XVII p. 661.

1. **Lizoniella Cupaniæ** (Rehm) Sacc. et Trott., *Lizonia Cupaniæ* Rehm, 8877 Ann. Mycol. V (1907) p. 527. — Maculis nullis; peritheciis hypophyllis, in soros orbicularis 2,5 mm. diam., centro saepe nudis et albidulis arce congregatis, sessilibus, globulosis, vix papillatis, poro pertusis; contextu parenchymatico membranaceo, glabris, fuscis, 90-100 μ . diam.; ascis fusiformibus, sessilibus, 60 \times 12, apice rotundatis, 8-sporis; sporidiis fusiformibus, utrinque subrotundatis, rectis medio septatis, haud constrictis, hyalinis, 25 \times 3,5-4, 2-3-stichis; paraphysibus 3 μ . cr., septatis, hyalinis.

Hab. ad folia Cupaniæ, São Leopoldo, Rio Grande do Sul
Brasilicæ (RICK S. J.).

2. *Lizoniella leguminis* (Rehm) Sacc. et Trott., *Lizonia leguminis* 3878
Rehm in Broteria V (1906) p. 226. — Peritheciis late arcteque con-
gestis, sessilibus, globulosis, poro minutissimo pertusis, atris, gla-
bris, 200 μ . diam., contextu parenchymatico fusco, membranaceo;
ascis fusiformibus, 40-42 \times 10, tetrasporis, apophysatis; sporidiis
oblongo-fusoideis, utrinque rotundatis, medio septatis, vix constri-
ctis, hyalinis, 18 \times 3-4, distichis.

Hab. in superficie externa leguminis speciei indet. in Brasilia.

— *Liz. Uleanæ proxima* videtur.

3. *Lizoniella Syzygii* (Rac.) Sacc. et Trott., *Lizonia Syzygii* Racibor- 3879
ski, Bull. Ac. Sc. Cracovie (1909) p. 387. — Maculis hypophyllis,
sparsis, subrotundis, nigricantibus 2-3,5 mm. lat., stromatoideis;
peritheciis globulosis minutissimis, nigris, concentrica dense seriat-
is, basi lata sessilibus, hyphis mycelicis penetrantibus, brevi-cellula-
ribus, brunneis basi auctis, globosis, 120 μ . diam., ostiolo im-
presso, minuto; ascis apophysatis, tereti-clavatis, 68-82 \times 16, octo-
sporis; sporidiis breve fusoideis, 30 \times 4-5, rectis, levibus, utrinque
acutis, hyalinis, medio non constrictis, bicellularibus.

Hab. in foliis Syzygii sp., Salak et Megamendong pr. Bui-
tenzorg Javæ.

4. *Lizoniella fructigena* Syd., Ann. Mycol. V (1907) p. 357. — Pe- 3880
ritheciis in superficie fructuum dense dispositis et sæpe eos omnino
obtegentibus, erumpenti-superficialibus, atris, subglobosis, rugulo-
sis, vel papillatis, ca. 125-200 μ . diam., contextu parenchymatico
olivaceo-fusco; ascis cylindraceis, sessilibus, rectis vel sæpius cur-
vulis, 65-90 \times 8-14, octosporis; sporidiis monostichis, ovatis v. el-
lipsoideis, utrinque rotundatis, medio 1-septatis, non constrictis,
hyalinis, 11-18 \times 7-9.

Hab. ad fructus Eugeniae spec. Prov. São Paulo, São Fran-
cisco dos Campos Brasilicæ.

5. *Lizoniella Uleanæ* (Sacc. et Syd.) Sacc. et Trott. *Lizonia Uleanæ* 3881
Sacc. et Syd. — Syll. XVI, p. 485. — Var. *Tournefortiae* Rehm,
Ann. Mycol. V (1907) p. 528. — Peritheciis 2-20 dense confertis,
in maculis orbicularibus, dilute ochraceis, 0,5 mm. diam. insiden-
tibus; ascis parte superiore ovalibus vel clavatis, rotundatis, ple-
rumque in stipitem brevem contractis; sporidiis oblongis, utrinque
rotundatis, medio septatis et subconstrictis, guttulis minutissimis

- repletis, hyalinis; paraphysibus interdum dichotomis, septatis, 1,5 μ ., ad apicem usque 2 μ . latis.

Hab. in foliis vivis Tournefortiæ, Villa Marianna, Sao Paulo Brasiliæ (USTERI).

6. *Lizoniella stromatica* (Rehm) Sacc. et Trott. *Lizonia stromatica* 3882 Rehm, Ann. Mycol. VI (1908) p. 323. — Peritheciis in pagina superiore foliorum primitus gregarie innatis, dein in maculis circumscriptas aterrimas, suborbiculares, 3-4 mm. diam. arctissime congregatis, prominentibus, sphæroideis, poro pertusis, crasse subcarbonaceis, 60-70 μ . diam.; ascis fusiformi-clavatis, 60-65 \times 12, octosporis; sporidiis linearibus, rectis, utrinque obtusis, medio septatis, haud constrictis, utraque cellula prope septum 1-guttulata, hyalinis, 2-3-seriatis, 25-30 \times 4-4,5; paraphysibus nullis.

Hab. in foliis emortuis Saxifragæ? in Alpe Arlbergensi Algoviae (C. ARNOLD). — Habitus hinc *Sphaerellæ*, illinc *Euryachoræ*.

7. *Lizoniella Aetoxici* (Speg.) Sacc. et Trott., *Lizonia Aetoxici* Speg., 3883 Fungi Chilenses (1910) p. 59, cum icon. — Maculis nullis; peritheciis innato-superficialibus lenticularibus parvis, atris, nitidulis, coriaceis, astomis (?), 200-250 μ . diam.; ascis subcylindraceis brevissime pedicellatis subparaphysatis, 65-75 \times 7-8, octosporis; sporidiis oblanceolatis v. cylindraceo-subnavicularibus, medio 1-septatis hyalinis subsparsis, 14-16 \times 2,5, monostichis v. distichis.

Hab. ad folia dejecta subputrescentia Aetoxici punctati, Cerro Caracol de Concepcion, Chile Amer. austr.

8. *Lizoniella Hypnorum* (Ferd. et Winge) Sacc. et Trott., *Lizonia Hypnorum* Ferdinand. et Winge, Bot. Tidsskr. XXVIII (1907) p. 254, f. 3. — Peritheciis epiphyllis, globosis, subastomis v. apice truncato-conoideis, hyphis a basi prodeuntibus, fuligineis 2,5-4 μ . cr., in folio repentinibus affixis, 50-60 μ . diam., nigris; ascis rhomboideo-saccatis v. crasse clavatis, versiformibus, 37-44 \times 12-18, tetra-octosporis; sporidiis ovato-ellipsoideis, 1-septatis, saepe inaequilateralibus loculoque superiori majori, 11-16 \times 5-6,5, hyalinis.

Hab. ad folia viva Hypni (Stereodontis) cupressiformis prope Borry Jutlandie.

OTTHIELLA Sacc. — Syll. I p. 739, XVI p. 1135, XVII p. 662.

1. *Otthiella collabens* Speg., An. Mus. Nac. Buenos Aires t. XIX 3885 (1909) p. 358. — Maculis nullis; peritheciis parvulis 100-150 μ . diam., dense constipatis, subpedicellatis, in sicco cupulato-collabescitibus, atris, glabris; ascis e cylindraceo subclavulatis, 60 \times 8-

10. paraphysatis, octosporis; sporidiis subellipsoideis 1-septatis hyalinis 12-14 \approx 5-6, loculis subæquilongis sæpius minute biguttulatis.

Hab. in disco ramorum excæsorum *Pruni armeniacæ* in hortis prope Tucuman Rep. Argentina Amer. austr.

2. *Otthiella Schiffneri* v. Höhnel, Ergeb. Bot. Exp. Südbras. 1901, 3886

Denk. k. Ak. d. Wiss. Wien Bd. LXXXIII (1907) pag. 25. — Peritheciis coriaceo-carbonaceis, asperulis, pachydermicis, ovoideis, 250-350 μ . diam., basi stipitiformi 400-450 \approx 250-300 suffultis, stromateque irregulariter verruciformi carbonaceo erumpenti-superficiali confertim insertis, soros 2-4, aut ad foliorum nervos usque ad 10 mm. long. formantibus; ascis filiformi-paraphysatis, sessilibus, clavatis, 70-90 \approx 9-10, octosporis; sporidiis subdistichis, hyalinis, bicellularibus, fusoideis, rectiusculis, rarius curvulis, utrinque acutis, medio non constrictis, tenuiter tunicatis, 22-25 \approx 5-5,5.

Hab. in pag. inf. foliorum arboris ignotæ, pr. São Paulo Brasilæ (SCHIFFNER).

3. *Otthiella Fairmani* Saccardo, Microm. Amer. Novi, Journ. of Mycol. v. XII (1906) pag. 48. — Peritheciis in acervulos minutos, suborbicularis, 1 mm. diam., erumpenti-superficialibus, in quoque acervulo paucis (5-7), globosis, subinde paullulum connatis, non v. obtuse papillatis, nigris, glabris, 400 μ . diam.; ascis tereti-elongatis, utrinque tenuatis, subsessilibus, 110-130 \approx 13-15, octosporis; paraphysibus filiformibus, copiosis; sporidiis distichis, oblongo-fusoides, curvulis, utrinque acutulis, medio septatis et denique constrictulis, 30-32 \approx 5,5-6, hyalinis v. dilutissime ochraceis, articulo super. sæpe paullo crassiore.

Hab. ad cortices dejectos in silvis pr. Lyndonville, New York Amer. bor. (FAIRMAN). — A ceteris generis speciebus omnino diversa.

GIBBERA Fr. — Syll. I p. 599, IX p. 306, XIV p. 542, XVI p. 491, XVII p. 813.

1. *Gibbera riograndensis* Rehm, Broteria V (1906) p. 226. — Peritheciis in greges superficiales 2-10 mm. latos, effusos arcte confertis, globulosis, papillula minutissima demum pertusa, nigro-fuscidulis, submembranaceis, 0,3-0,5 mm. diam., imprimis basi hyphis longis simplicibus, septatis, fuscis, 3-6 μ . cr., vestitis usque stromaticce coacervatis; ascis clavatis, apice rotundatis, 100 \approx 10, octosporis; sporidiis subclavatis, utrinque obtusis, rectis, 2-cellularibus, cellula superiore interdum breviore, ad septum non con-

strictis, dilute fuscidulis, 18-20 \times 5, distichis; paraphysibus filiformibus 2 μ . cr.

Hab. ad corticem, Rio Grande do Sul Brasiliæ (J. RICK).

Sect. 5. Phæodidymæ.

PHÆOSPHÆRELLA Karst. — Syll. IX p. 723, XI p. 312, XVI p. 498, XVII p. 675.

1. **Phæosphærella scirpicola** Earle, Bull. of the N. York Bot. Gard. 3889 (1904) p. 293. — Peritheciis sparsis, epiphyllis, subsuperficialibus, minutis, nigris, membranaceis, 250 μ . diam.; ascis ellipsoideis, 40-50 \times 18, aparaphysatis; sporidiis fasciculatis, cylindraceis, medio 1-septatis, non constrictis, initio hyalinis, dein brunneis, 30-35 \times 4, loculis 4-guttulatis.

Hab. in foliis arescendo dealbatis Scirpi sp. pr. Standford University, California (C. F. BAKER).

2. **Phæosphærella? donacicola** Speg., An. Mus. Nac. Buenos Aires 3890 t. XIX (1909) p. 370. — Matricem totam sordide infuscans; peritheciis minutis epidermide velatis confertis vix papillulato-ostiolatis, ex hemisphærico lenticularibus 150-180 μ . diam.; ascis cylindraceis aparaphysatis, octosporis 55-60 \times 4-5; sporidiis rectis v. oblique monostichis elongato-ellipsoideis, 8-10 \times 3-3,5, medio septato-constrictulis, pallide fusco-olivaceis, loculis subæqualibus, 1-guttulatis.

Hab. ad culmos putrescentes Arundinis Donacis, Lezama prope Buenos Aires Rep. Argentina Amer. austr.

3. **Phæosphærella alpestris** (Friederich) Sacc. et Trott. *Sphaerothecium* 3891 *alpestre* Friederich, Beitr. zur Anat. d. Silikatflechten Jnaug.-Dissert., Stuttgart (1904) pag. 31. — Mycelio epiphytico effuso e cellulis amplis globosis brunneis formato, copioso et irregulariter ramoso; peritheciis rarioribus, globosis, extus brunneis, contextu tenui; ascis paucis jodi ope immutatis, octosporis; sporidiis ellipsoideis, 1-septatis, non constrictis, brunneis, 10 \times 7.

Hab. in thallo Usnea nec non in cortice præpinquo Pini Cembræ, Karrerpass Tiroliaæ.

4. **Phæosphærella Senniana** Sacc., in Ann. Mycol. XII (1910) p. 337. 3892 — Peritheciis plerumque epiphyllis, nunc maculas subcirculares brunneolas occupantibus, nunc æque orbiformiter dispositis sed sine maculis, saepius circinato-gregariis, punctiformibus pere exiguis, 60-

90 μ . diam., lenticularibus, prominulis, nigris, calvis, ostiolo subcirculari, 12-14 μ . diam. pertusis; contextu obsolete parenchymatico, fuligineo; subiculo omnino nullo; ascis aparaphysatis, oblongo-fusoideis, utrinque obtusis, subsessilibus, 28-30 \approx 8,5-10, octosporis; sporidiis distichis, oblongis, utrinque præcipue apice obtusulis, medio 1-septatis, non constrictis, 11-12 \approx 4-4,5, atro-olivaceis.

Hab. in foliis morientibus Proteæ abyssinicae, Addi Nefas Erythrææ (Legit LAUR. SENNI, dedit prof. J. H. MATTER).

TICHOThECIUM Flot. — Syll. IX p. 723, XIV p. 551, XVI p. 498, XVII p. 676.

1. **Tichothecium Latzelii** Keissl., Oesterr. botan. Zeitschr. (1909) p. 277. 3893

— Peritheciis immersis, apice rotundato ostiolato prominulis, depresso-globosis, atris, parvis, c. 200-300 μ . diam.; ascis cylindrico-clavatis, non stipitatis, 8-sporis, c. 45-55 \approx 12-15, paraphysibus nullis; sporidiis fusiformibus rectis, uniseptatis, brunneolis, 2-4-guttulatis, oblique 2-seriatis, c. 12-15 \approx 6.

Hab. in thallo Collematis pulposi prope Forte Lorenzo ad Ragusam Dalmatiae (A. LATZEL). — Hymenium jodi ope immitatum.

2. **Tichothecium collemarium** (Linds.) Zopf in Hedw. (1896) p. 324, 3894

Microthelia collemaria Linds. Lichenicol. Micro-fungi, pag. 555, t. XXIV, f. 22. — Peritheciis minutis, nigris; ascis saccato-clavatis, apice rotundatis basi breviter tenuatis, copiose filiformi-paraphysatis, 90-100 \approx 30-40, polysporis; sporidiis conglobato-polystichis, oblongo-ellipsoideis 1-septatis, non constrictis, utrinque rotundatis, loculis æqualibus, brunneis, 10-12 \approx 5-5,5.

Hab. in thallo Collematis muscicoli, Cleveland, Yorkshire Britanniæ (MUDD) et Collematis melæni, Otago in Nova Zealandia (LINDSAY).

3. **Tichothecium stigma** Körb. — Syll. IX, p. 724. — Var. *obtusisporum* Bagl. et Carestia, in Atti Soc. crittog. ital. II (1879) p. 354, tab. 5, f. 80. — Ascis late clavatis, octosporis; sporidiis minoribus, ellipsoideis, utrinque sat obtusatis, bilocularibus, fuscentibus, 12-13 \approx 6.

Hab. in thallo Opegraphæ zonatae al Sacco Riva Valsesia Ital. bor. (Ab. CARESTIA).

DIDYMOsPHÆRIA Fuck. — Syll. I p. 701, IX p. 728, XI p. 312, XIV p. 551, XVI p. 498, XVII p. 676.

1. **Didymosphaeria Fumanæ** Hollós, Ann. Mus. Nat. Hung. V (1907) 3896 pag. 455. — Peritheciis gregariis, superficialibus, globosis nigris, 180-220 μ . diam., ostiolo conicis; ascis clavatis, apice rotundatis, breve stipitatis, 8-sporis, 64-74 \times 14-18; paraphysibus filiformibus septatis; sporidiis distichis, oblongis, medio 1-septatis, constrictis, pluriguttulatis, olivaceis, 20-24 \times 7-8.
Hab. in ramulis decorticatis *Helianthemum Fumanæ* prope Kecskemét Hungariæ.
2. **Didymosphaeria araucana** (Speg.) Sacc. et Trott., *Microthelia araucana* Speg., Fungi Chilenses (1910) p. 71. — Peritheciis sparsis minutis lenticularibus, cortice innatis epidermide clypeatim nigriticata tectis, subcarbonaceis, 200-250 μ . diam., ostiolo vix prominenti; ascis cylindraceis modice pedicellatis densissime paraphysatis, octosporis, 110-120 \times 12-14; sporidiis ellipsoideis, fuligineis, medio 1-septatis, non vel vix constrictulis, utrinque obtusis, 16-18 \times 8-9:
Hab. in ramis siccis *Rubi sancti*, Bahia de Corral, Chile Amer. austr.
3. **Didymosphaeria ludens** (Schulz.) Sacc. et Trav. — Syll. XIX p. 599 3898 — *Sphaeria ludens* Schulz. v. Mügg., in Verh. zool.-bot. Gesell. Wien (1871) p. 1253, t. XIII, f. 34. — Peritheciis gregariis, sub-superficialibus globoso-depressis, epapillatis, nigris; ascis cylindraceis apice rotundatis, breviuscule stipitatis, paraphysibus parcis subinde ramulosis obvallatis, 8-sporis; sporidiis monostichis, crebris, ellipsoideo-oblongis, utrinque rotundatis, constricto-1-septatis, brunneis, 14 \times 4
Hab. in ramis decorticatis *Cydonia vulgaris* in Hungaria.
4. **Didymosphaeria ? eugeniicola** Speg., Fungi Chilenses (1910) p. 68. 3899 — Peritheciis cortice innatis, epidermide tectis, sparsis v. subseriatis, subcarbonaceis, minutis, atris, ostiolo impresso pertusis, 150-180 μ . diam.; ascis e cylindraceo subclavatis, brevissime pedicellatis, parce paraphysatis, octosporis, 100-120 \times 30; sporidiis ellipsoideo-didymis, submajusculis, opacis fuligineis, 26-34 \times 14.
Hab. in ramulis siccis *Eugeniae obtusæ*, Cerro Caracol de Concepcion, Chile, Amer. austr.
5. **Didymosphaeria Verbæ** Speg., An. Mus. Nac. Buenos Aires t. XVII 3900 (1908) p. 122. — Ramulicola; peritheciis minutis, sparsis, epidermide velatis, 90-100 μ . diam., coriacellis, ostiolo vix papillulato epidermidem perforante; ascis cylindraceis breviter cuneato-pedicellatis, longius paraphysatis, apice obtuse rotundatis, 50-60 \times 5-6,

octosporis; sporidiis minutis subellipsoideis, didymis, modice constrictis, fusco-fumosis, monostichis, utrinque obtusis, $8-9 \approx 3,5-4$.

Hab. in ramulis languidis v. emortuis Ilicis paraguariensis (*Yerba Mate*) in dumetis prope Campo das Cuias, Misiones Argentiniæ. — Cum *D. Sellæ* non comparanda.

6. **Didymosphaeria Ribis** Hazsl., Sphær. Hung. pag. 123, tab. VIII, 3901 fig. 32 (in textu ut var. *D. epidermidis*). — Peritheciis globosis, parum deplanatis, ostiolo rotundo perforatis, aggregatis, epidermidem papillatim elevantibus, demum apice perforantibus; ascis cylindricis stipitatis, stipite 4 μ . longo præditis, paraphysatis; sporidiis ovalibus, uniseriatis, $8-12 \approx 3,5-5$.

Hab. in ramis Ribis alpini in Hungaria. — A typo, teste auctore, recedit habitu, paraphysibus simplicibus et dimensionibus.

7. **Didymosphaeria ? sordidissima** Speg., An. Mus. Nac. Buenos Aires 3902 t. XIX (1909) p. 371. — Peritheciis ligno late sordideque infuscato immersis, globulosis v. latere compressulis, $100-150 \mu$. diam., ostiolo superficiem matricis attingente, non v. vix exerto armatis; ascis cylindraceis breviuscule pedicellatis $100 \approx 6$, paraphysibus filiformibus longioribus obvallatis, octosporis; sporidiis didymis ellipsoideis, $12 \approx 5$, medio 1-septato-constrictulis, fuligineis, loculis subæquatibus saepius grosse 1-2-guttulatis.

Hab. ad ramos decorticatos putrescentes Solani verbascifolii, Santa Catalina prope Buenos Aires Rep. Argentina Amer. austr.

8. **Didymosphaeria coffeicola** Speg., An. Mus. Nac. Buen. Air. t. XIX 3903 (1909) pag. 370. — Matrice immutata; peritheciis sparsis minute innato-erumpentibus subcarbonaceis, ostiolo vix papillato coronatis, e lenticulari subhemisphaericis, 120μ . diam.; ascis subclavatis, 4-8-sporis, $60 \approx 8-10$, paraphysibus filiformibus longioribus cinctis; sporidiis didymis, distichis, ellipsoideo-biconoideis, saepius leniter inæquilateralibus, $10-14 \approx 3-4$, medio 1-septato-constrictulis, primo hyalinis dein obscure fuligineis, loculis subæqualibus diblastis v. grosse biguttulatis.

Hab. ad ramulos dejectos putrescentes Coffeæ arabicæ, São Paulo, Brasilia Amer. austr. (C. GIROLA).

9. **Didymosphaeria massarioides** Sacc. et Brun. — Syll. IX, p. 729. — 3904 var. **major** Potebnia, Myc. St. in Ann. Myc. V (1907) p. 14, f. 24 (ex errore « minor ») et Trav. Soc. Nat. Univ. Kharkow XXXXVIII (1907). — Peritheciis 0,7-0,8 mm. cr., collo 150 \approx 17-24; sporidiis 30-35 \approx 10-14.

Hab. in ramis siccis *Lycii barbari* socio *Camarosporio Lycii* et *Sporodesmio Lycii*, Kharkow Rossiaæ. — An eadem ac *Didymosphaeria Lycii* Sacc.?

10. **Didymosphaeria victoriensis** Sacc., Not. Myc. VI, Ann. myc. III 3905 (1905) p. 510. — Peritheciis gregariis, subcutaneis, globulosis, nigrantibus, crassiusculæ membranaceis, $\frac{1}{3}$ mm. diam., ostiolo obtuso brevissimo parce erumpenti; contextu e cellulis 8-10 μ . diam., rufo-fuligineis formato; ascis cylindraceis, breve noduloso-stipitatis, 8-sporis, apice rotundatis, 85-95 \times 15-16, paraphysibus crassiusculæ filiformibus, ascos non excedentibus, parcis; sporidiis ovoideo-oblongis, distichis v. oblique monostichis, medio constricto-1-septatis, 19-22 \times 9, utrinque rotundatis, loculo sup. interdum paullo crassiore, olivaceo-fuligineis.

Hab. in caulis emortuis *Artemisiae camphoratae*, Vitorio (Treviso) Ital. bor. — Affinis *D. permutatae*, *D. pulchellæ* etc.

11. **Didymosphaeria peregrina** Sacc., Note myc. VIII, Ann. Myc. 3906 v. IV (1906) p. 491, tab. X, fig. 2. — Peritheciis gregariis punctiformibus, lenticularibus, subcutaneis, 110-130 μ . diam., ostiolo brevissimo vix 20 μ . diam. erumpente; contextu laxe celluloso pallide fuligineo, circa ostiolum densiore, saturatione; ascis cylindraceo-obclavatis, brevissime stipitatis, deorsum incrassatis, sursum obtuse tenuatis, 35-40 \times 7-9, octosporis; paraphysibus filiformibus inæqualibus, ascos non superantibus, guttulatis; sporidiis distichis, sursum saepius monostichis, oblongis, utrinque rotundatis, medio 1-septatis, leviter constrictis, 10-12 \times 4-4,5, chlorinis dein olivaceis, cellula superiore paullo crassiore.

Hab. in caulis emortuis *Scabiosæ Succisæ*, socio *Fuscladio consorte*, cuius est forte status ascophorus, Meudon Galliae. (LUDWIG, comm. P. HARIOT).

12. **Didymosphaeria ? pusilla** Speg., Fungi Chilenses (1910) p. 67. — 3907 Maculis nullis; peritheciis hypophyllis parenchymate innatis, epidermide velatis, lenticularibus, pusillis, vix prominulis, 150 μ . diam., astomis?, subcarbonaceis; ascis cylindraceis breviter pedicellatis, octosporis, paraphysatis 60-80 \times 8-9; sporidiis mono- v. distichis, fusoideis subnavicularibus, parvis, fumosis, primo continuis dein 1-septatis, non constrictis, 13-15 \times 3-4.

Hab. in foliis siccis *Guevinæ Avellanæ* in silvis prope Cerro Caracol de Concepcion, Chile Amer. austr.

13. **Didymosphaeria ? Boldoæ** Speg., Fungi Chilenses (1910) p. 66. — 3908 Peritheciis sparsis v. laxe gregariis epidermide sublevata tectis

sublenticularibus minutis, coriacellis, nigris, ostiolo impresso-pertusis 150-200 μ . diam.; ascis e cylindraceo subclavulatis, apophysatis, octosporis, 120 \times 20-22; sporidiis elliptico- v. ovato-didymis, mediocribus, subconstrictis, subopacis, fuligineis, 21 \times 12.

Hab. in ramis emortuis v. subputrescentibus Boldoæ fragrantis prope Talcahuano, Chile Amer. austr. — Ob sporidiorum stratum mucosum nullum generi *Massariellæ* non adscribenda species videtur.

14. **Didymosphaeria Wallrothii** (Hepp) Sacc. et Trott., *Massariopsis* 3909
Wallrothii (Hepp) Rehm, Ann. Mycol. IV (1906) p. 270, *Pyrenula Wallrothii* Hepp, Lich. exs. n. 709 et Abbild. t. 81, f. 709,
Microthelia betulina Lahm ap. Körb. Par. lich. p. 397, *Verrucaria micula* f. *furfuracea* Garov. Tent. dispos. lich. I, p. 79. — Peritheciis cortice innatis et maculas nigricantes gignentibus, initio punctiformibus, dein subliberis, globosis, poro pertusis; ascis octosporis; sporidiis bilocularibus utrinque rotundatis, medio constrictis, 13-23 \times 4-7.

Hab. in cortice Betulæ in Helvetia (HEPP) et Germania (LAHM).

15. **Didymosphaeria conoidea** Niessl — Syll. I, p. 702. — f. *conigena* 3910
 Bianchi, Micol. prov. Mantova, Atti R. Ist. bot Pavia ser. II, v. IX, p. 301. — Ascis 55-60 \times 7-8; sporidiis medio valde constrictis, pallide fuscis, 10-12 \times 5, paraphysibus elongatis asco longioribus.

Hab. in strobilis Abietis pr. Mantova Ital. bor. — Præcipue ascis brevioribus, sporidiis magis constrictis, matrice etc. a typo satis distincta. — Var. *major* Starb. Ascom. Schwed. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 22. — Peritheciis plane immersis, sphæroideis, ostiolo cylindraceo-conico, rugosiusculo epidermidem perrumpentibus; ascis octosporis, cylindraceis, 82,5-90 \times 6-7; sporidiis plerumque imbricatim monostichis, majoribus, 9-15 \times 6-6,5; paraphysibus numerosis, filiformibus, sursum ramulosis, ramulis flexuosis vel sëpe tortuosis, hyalinis. — In caulinis emortuis, Prov. Jujuy, Quinta, pr. Laguna de la Brea, Argentina. — A typo sporidiis majoribus, a *D. conoidella* Sacc. et Berl. sporidiis monostichis, a *D. subconoidea* Bomm. Rouss. Sacc. paraphysibus non septatis diversa; forsitan specifice distinguenda.

6. **Didymosphaeria Astrocaryi** v. Höhn. Fragm. z. Mykol. X (1910) 3911
 p. 42. — Peritheciis laxè sparsis, epiphyllis, hypodermio innatis, globosis, sursum subdepressis, 300-360 μ . diam., ostiolo conico, so-

lido 120 μ . alto erumpentibus, contextu brunneo e cellulis polygoniis 5-8 μ . diam. conflato; ascis clavatis, apice rotundatis, 85 \times 12, in pedicellum 15 μ . long., tenuatis, paraphysibus copiosis filiformibus una cum ascis muco immersis, octosporis; sporidiis distichis, bicellularibus, cinereo-brunneis violaceo-tinctis, non v. vix constrictis, oblongo-cylindraceis utrinque obtusis, 11-16 \times 4-4,5.

Hab. in foliis *Astrocaryi vulgaris* in Guiana, frequens (LEPRIEUR).

17. *Didymosphaeria scabrispora* v. Höhn., Fragm. z. Mykol. IX (1909) 3912 p. 41. — Peritheciis sparsis, ad 140 μ . matrice supra atrata immersis, 1,5-2 mm. long., 0,3-0,7 mm. lat. (majoribus), oblongis, depressis, ostiolo applanato, oblongo, non emergente, contextu membranaceo-molli, parum evoluto, brunneolo, e cellulis angustis conflato; ascis cylindraceis, breviter pedicellatis, apice rotundatis, tenui-tunicatis, octosporis, 175-200 \times 9-9,5; paraphysibus copiosis, 1 μ . cr., sursum ramoso-connexis, muco obductis; sporidiis monostichis, oblongis utrinque obtusule tenuatis, rectis, bicellularibus ad septum non v. vix constrictis, umbrinis, 26-30 \times 7-8, tunica dupli præditis, tenuiter reticulato-spinulosis.

Hab. in culmis tenuioribus *Bambusa* in horto botanico Buitenzorg Javæ.

18. *Didymosphaeria bambusicola* v. Höhn., Ergeb. Bot. Exped. Südbras. 3913 1901, Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) p. 25. — Peritheciis gregarie sparsis, epidermide non atrata tectis, nigro-brunneis, firme membranaceis, globulosis, supra late conoideis, 400-450 μ . diam.; ascis cylindraceis 65-70 \times 4-5,5; paraphysibus copiosis, filiformibus, sursum reticulato-connexis, dein deliquescentibus; sporidiis monostichis, brunneis, bicellularibus, levibus, oblongis, utrinque saepius obtuse conico-tenuatis, medio leviter constrictis, 8-12 \times 3-4, cellula sup. pro more paulo crassiore.

Hab. in culmis *Bambusa*, Sao Paulo Brasiliæ.

19. *Didymosphaeria saccharicola* Speg., An. Mus. Nac. Buenos Aires 3914 t. XIX (1909) p. 370. — Matrice non v. vix infuscata; peritheciis parvis laxe gregariis vix ostiolato-papillatis, 150-180 μ . diam.; ascis cylindraceis breviuscule pedicellatis, octosporis, 110-120 \times 8-10, paraphysibus filiformibus sublongioribus densis ovallatis; sporidiis monostichis, elongato-ellipsoideis, medio 1-septatis, non vel vix constrictis, pallide fuligineis, rectis v. obsoletissime subnavicularibus, 15 \times 5, loculis æqualibus 1-guttulatis.

Hab. ad culmos dejectos putrescentes Sacchari officinarum prope Ledesma, Jujuy Rep. Argentina Amer. austr.

20. **Didymosphaeria Werthiana** P. Henn., Deutsche Südpolar-Exped. 3915

Bd. VIII (1906) pag. 10, tab. II, f. 6 a-b (extr.). — Peritheciis amphigenis sparsis v. gregariis, innato-tectis, ostiolo erumpentibus, atro-membranaceis, subglobosis, 250-280 μ . diam.; ascis late clavatis, apice tunicatis, obtuse rotundatis, basi attenuatis, saepe stipitato-curvatis, octosporis, 80-120 \times 25-40; paraphysibus filiformibus, hyalinis; sporidiis subdistichis v. conglobatis, saepe crasse hyalino-mucosis, ellipsoideis v. subovoideis, rectis v. subcurvis, primo hyalinis, 2-guttatis, dein fusco-brunneis, medio 1-septatis, constrictis, 25-30 \times 10-14.

Hab. in foliis Poæ Cookii in Possession ex insulis Crozet in Polo austr. (Doct. E. WERTH). — Species prædictincta.

21. **Didymosphaeria Puyæ** (Speg.) Sacc. et Trott., *Microthelia Puyæ* 3916

Speg., *Fungi Chilenses* (1910) p. 71, c. ic. — Maculis nullis; peritheciis epiphyllis, globosis, 200-250 μ . diam., matrice omnino infossis, ostiolo vix papillato superficiem epidermidis attingente, areola pusilla nigra cincto, coronatis; ascis cylindraceis, breviter pedicellatis, parce paraphysatis, octosporis, 140-160 \times 14-15; sporidiis submediocribus, pulchre fuligineis, tunica mucosa crassa vestitis, 20-22 \times 9-10.

Hab. in foliis emortuis putrescentibus Puyæ chilensis, Cerro Alegre de Valparaiso, Chile Amer. austr.

Subgen. *Endococcus* Nyl. Species lichenicoleæ [Cfr. Syll. XVII, p. 681].

22. **Didymosphaeria stictaria** (Linds.) Sacc. et Trott., *Microthelia stictaria* Linds., Lichenic. Micro-fungi p. 541, t. XXIV, f. 4-5. —

Peritheciis minutis, nigris, superficialibus et facile secedentibus; ascis crasse clavatis, deorsum tenuatis, jodo violascentibus, minutis; sporidiis laxè distichis, constricto-didymis, loculo superiore lessimme crassiore, ex olivaceo brunneis, minutis, 8 \times 3,5.

Hab. in thallo Stictæ Freycinetii Campbell's Island (HOOKER). — Ab affini *D. rugulosaria* sporidiis minoribus recedit.

23. **Didymosphaeria perrugosaria** (Linds.) Sacc. et Trott., *Microthelia perrugosaria* Linds., Lich. and Fungi Otago p. 437, t. XXX, f. 23-28. —

Peritheciis gregariis semiimmersis, nigris, e cellulis minutis densis atro-brunneis formatis; ascis cylindraceis v. clavatis, copiose paraphysatis, jodo flaventibus, octosporis, 50 \times 12; sporidiis obli-

que monostichis v. distichis, ellipsoideis, 1-septatis, non constrictis
12 \times 6-7, brunneis.

Hab. in apotheciis, quæ nigro-punctata fiunt, *Placopsis* *dis*
perrugosæ, Otago in Nova Zelandia.

24. *Didymosphaeria* ? *Sauteri* (Körb.) Wint. — Syll. IX, pag. 738 — 3919
var. *margarodes* (Norm.) Sacc. et Trav. — Syll. XIX, p. 600. —
Polycoccum Sauteri var. *margarodes* Norm., Arnold in Flora, 57
(1874) pag. 174, t. II, fig. 10. — Sporidiis fuscis, didymis, 18-
22 \times 8-9.

Hab. parasitice in *Lichenibus* in Lapponia.

25. *Didymosphaeria rugulosaria* (Linds.) Sacc. et Trott., *Microthelia* 3920
rugulosaria Linds., Lichenicol. Micro-fungi, p. 540, t. XXIII, f. 32.
— Peritheciis minutissimis, punctiformibus v. papilliformibus, ni
gris, innato-superficialibus; ascis filiformi-paraphysatis, 40 \times 12-13,
octosporis; sporidiis ellipsoideo-clavatis, 12 \times 4,5, loculo superiori
crassiore et obtusiore, brunneis.

Hab. in apotheciis *Placodii rugulosi* ad saxa in Tasmania.

MICROTHELIÆ spec. Lindsayanæ, in Syll. XX, p. 89-90 citatæ, rectius
sub nominibus seq. in Syll. voluminibus præcedentibus describun-
tur: *Microthelia atricola* = *Trichothecium erraticum*, Syll. IX, 726
— *M. Cookei* = *Mycospherella Cookei*, Syll. XVII, 649 — *M. pa-
riétinaria* = *Didymosphaeria parietinaria*, Syll. XVII, 681 — *M.
ramalinaria* (sterilis, indeterminanda) — *M. stereocaulicola* = *Di-
dymosphaeria stereocaulicola*, Syll. XVII, 681. — *M. Umbilicariæ* =
Leptosphaeria Umbilicariæ, Syll. XVII, 731 — *M. vesicularia* =
Trichothecium pygmæum, Syll. IX, 726. — Ceteræ species sub ge-
neribus variis in ipso hoc volumine describuntur.

MASSARIELLA Speg. — Syll. I p. 716, IX p. 739, XI p. 314, XIV
p. 555, XVI p. 503, XVII p. 683.

1. *Massariella berberidincola* (Rehm) Sacc. et Trott., *Phorcys berbe- 3921
ridincola* Rehm, Ann. Myc. IV (1906) p. 268. — Peritheciis gre-
gariis in cortice interiore fuscato nidulantibus, plane tectis, ex pe-
ridermio immutato vix protuberantibus, globulosis, ostiolis minimis
prominentibus, nigris, submembranaceis, contextu parenchymatico,
fuscō, glabris 0,4-0,5 mm. diam.; ascis cylindraceis, apicē rotun-
datis, 200-220 \times 18 octosporis; sporidiis oblongis, utrinque obtusis,
medio septatis et valde constrictis, 24-27 \times 15, 1-stichis; paraphy-
sibus ramosis, 3 μ . cr.

Hab. ad truncum Berberidis vulgaris juxta Eibsee sub monte Zugspitz alpium Bavarie.

2. **Massariella Hualanæ** Speg., An. Mus. Nac. Buenos Aires t. XIX 3922 (1909) p. 368 c. ic. — Peritheciis denudatis lenticularibus, gregariis, vix papillulato-ostiolatis atris, 220-250 μ . diam.; ascis cylindraceis paraphysatis, octosporis 130 \approx 20; sporidiis saepius oblique monostichis, in ascis tunica mucosa crassa hyalina vestitis, extus saepius denudatis, 22-28 \approx 10-12, primo medio 1-septatis, non v. vix constrictis, hyalinis, serius 3-septatis constrictis fuligineis, loculis subæqualibus subcuboideis grosse 1-guttulatis.

Hab. ad ramos aridos et putrescentes Hualanæ collectioidis, Chacras de Coria prope Mendoza, Rep. Argentina Amer. austr. — An melius *Massaria*?

3. **Massariella Yerbæ** Speg., An. Mus. Nac. Buenos Aires t. XVII 3923 (1908) pag. 123, c. ic. — Corticola, epidermide velata; peritheciis lenticularibus, atris, membranaceo-carbonaceis, laxe gregariis, 400-750 μ . diam., ostiolo vix papillulato carbonaceo; ascis clavulato-cylindraceis, aparaphysatis, breviter cuneato-pedicellatis, 150 \approx 28 p. sporif. 120 μ . longa, apice obtuse rotundatis crasseque tunicatis; sporidiis majusculis ellipsoideo-subbiconicis, medio 1-sepatis non v. vix constrictis, opace fuligineis, primitus tunica tenuissime mucosa hyalina obvolutis, dein nudis, utrinque rotundatis sed saepius apiculatis, 30-35 \approx 14-15.

Hab. vulgata ad ramos emortuos Ilicis paraguariensis (*Yerba Mate*) Misiones Argentinæ Amer. austr.

4. **Massariella Montteæ** Speg., An. Mus. Nac. Buenos Aires t. XIX 3924 (1909) p. 367, cum icon. — Peritheciis sparsis v. laxe gregariis primo cortice tectis eoque secedente denudatis, parvis, carbonaceis, lenticulari-conoideis 150-250 μ . diam., vix ostiolato-papillatis; ascis subcylindraceis aparaphysatis subsessilibus, octosporis, 140-150 \approx 15-20; sporidiis monostichis ellipsoideo-didymis, tunica mucosa hyalina vestitis, fuligineis, grosse uniguttulatis, 20-24 \approx 12-13.

Hab. ad ramulos emortuos Montteæ aphyllæ in preandinis Potrerillos, prope Mendoza Rep. Argentina Amer. austr.

5. **Massariella palmicola** P. Henn., Engl. Jahrb. XXXVII (1905) 3925 p. 126. — Peritheciis gregarie sparsis, omnino immersis, atro-carbonaceis, globulosis v. ovoideis, 1-1,5 mm. diam., ostiolis vix erumpentibus, massam atram sporidiorum eructantibus; ascis clavatis, stipitatis, apice obtuse rotundatis, octosporis, 200-230 \approx 9-12, paraphysibus filiformibus, hyalinis, 2 μ . crassis; sporidiis oblique

monostichis, oblongis, subcylindraceis, utrinque obtusiusculis, rectis, ad basim 1-septatis, olivaceo-brunneis, 2-guttulatis, 20-30 \approx 6-8, cellula inferiori subpapillata, 4-6 \approx 3-4.

Hab. ad stipitem emortuum Palmæ spec., Kamerun Africæ trop.

6. **Massariella Palmarum** Maffei, Contr. Mic. Ligust. Atti R. Istit. Bot. 3926 Pavia ser. II, v. XII (1907, extr.) p. 5, tav. fig. 1-5. — Maculis atris; peritheciis sparsis v. gregariis, globoso-depressis, maiusculis, ostiolo erumpente; ascis cylindraceis, 80-110 \approx 10-13, paraphysatis, octosporis; sporidiis oblique monostichis, ellipsoideis, uniseptatis, ad septum constrictis, olivaceo-fuligineis, strato hyalino obvolutis, 15-18 \approx 6-8.

Hab. in foliis Cocoës campestris et Phœnicis silvestris, Pegli Liguriæ Ital. bor.

7. **Massariella lovereana** (Rehm) Sacc. et Trott., *Phorcys Lovereana* 3927 Rehm, Ann. Mycol. IV (1906) p. 269. — Peritheciis sparsis, folio immutato innatis, globulosis, papillula conoidea, obtusa, 0,2 mm. prominente, fusco-nigris, 0,2 mm. diam., subcoriaceis glabris; ascis cylindraceis, apice rotundatis, 150-180 \approx 28-30, 8-sporis; sporidiis ellipsoideis, medio septatis et valde constrictis, utroque apice papillulato-acutatis, subfuscis, guttulis minutissimis oleosis repletis, 30-38 \approx 12-15, strato mucoso 5 μ . lato obductis, 1-stichis; paraphysibus filiformibus.

Hab. in folio graminis in muro prope Lovere (lacus Iseo) Italiæ sup. (Dr. REHM). — Proxima *Mass. Eriophori* Feltgen (Pilzfl. Luxemburg, III, p. 162) ad *Eriophorum angustifolium*, sed sporidiis 40-43 \approx 17,5-28 haud acutatis plane diversa videtur.

AMPHISPÆRIA Ces. et De Not. — Syll. I p. 718, IX p. 741, XI p. 315, XIV p. 555, XVI p. 503, XVII p. 683.

1. **Amphispæria æruginosa** Fairm., Proc. Rochester Ac. of Sc. IV 3928 (1906) p. 221, tab. XXII, fig. 1-4. — Peritheciis sparsis v. gregariis, minutis, 80-100 μ . diam., depresso hemispæricis, erumpentibus, nigris, ostiolo minuto papillato; ascis teretibus, 4-8-sporis; sporidiis anguste ellipsoideis, utrinque obtusulis, rectis vel curvis, 1-septatis, vix constrictis, monostichis, initio fumosis dein pallide brunneis, 13-15 \approx 2,5-3,5.

Hab. ad asseres dejectos vetustos Tiliæ pr. Lyndonville N. Y. Amer. bor. — Lignum, quo innascitur, intus *Chlorosplenii* ope est viridi-tinctum.

2. **Amphisphaeria biformis** (Borr.) Rehm, Ann. Mycol. IV (1906) 3929
 p. 264, *Verrucaria biformis* Borr. in Engl. Bot. Suppl. I, p. 617,
Verrucaria micula Flotow ap. Garovaglio, Tent. disp. II, p. 78,
 t. suppl. I, f. 4, *Microthelia micula* Körb. Syst. lich. Germ. p. 373
 et Parerga pag. 397. — Mycelio tenuissimo indeterminato effuso
 cinereo-rufescente, nitidulo, dein opace subgranuloso; peritheciis
 sphaericis acuminato-papillatis v. collapsis; ascis elliptico-obovatis,
 paraphysibus tenuibus implexo-ramosis articulatis obvallatis; spo-
 ridiis dense 2-3-seriatis, ellipsoideis, 12,5-15,5 \times 4-5,7, bilocularibus,
 loculis conformibus, late conicis apice rotundatis.

Hab. in cortice Tiliæ in tota fere Europa. — Auctoritate
 cl. Rehm huc translatæ species.

3. **Amphisphaeria ephemera** Rehm, Ann. Mycol. IV (1906) p. 263. 3930
 — Peritheciis in interiore corticis relaxati sparsis, sessilibus, glo-
 bulosis, nudo oculo vix conspicuis, nigris, circa ostium pilis ob-
 tusis, fuscidulis, septatis, 10-25 \times 5 obcessis, 100 μ . diam., contextu
 parenchymatico; ascis clavatis, paraphysibus septatis obvallatis,
 teneris, 60 \times 15, octosporis; sporidiis oblongo-ovoideis, medio sep-
 tatis, non constrictis, 12-13 \times 6-7, distichis, fuscis, grosse 2-gut-
 tatis.

Hab. ad corticem Piri Mali, Sugenheim Franconia bav.

4. **Amphisphaeria xera** Fairm., Ann. myc. VIII (1910) p. 327. — Peri-
 theciis 0,5 mm. diam., atris, carbonaceis, sparsis vel subgregariis,
 initio immersis, dein superficialibus, glabris, ostiolo minuto; ascis
 cylindraceis, p. sp. 70-75, octosporis (? a paraphysatis); sporidiis ob-
 longis, uniseptatis, constrictis, loculis inæqualibus, guttulatis, gra-
 nulosis, sæpiissime tenui fissura divisis, striatis v. corrugatis (ex
 siccitate ?), monostichis v. subdistichis, fusco-olivaceis, fuligineisve,
 17-23 \times 6-7.

Hab. ad corticem ? Pruni sp. in silvis prope Lyndonville
 N. Y. Amer. bor.

5. **Amphisphaeria Schulzeri** Sacc. et Trav. - Syll. XIX, pag. 68 - 3932
Sphaeria Amphisphaeria Schulz. v. Mügg. in Verhandl. zool.-bot.
 Gesellsch (1871) p. 1255, t. 13, f. 36. — Peritheciis subsuperfi-
 cialibus, approximatis, globoso-ovoideis, nunc papillatis, nunc epa-
 pillatis; minute verruculosis, 200-270 μ . diam., tenuiter carbona-
 ceis, vetustis vertice ruptis; ascis cylindraceis, filiformi paraphy-
 satis, octosporis, breviter pedicellatis; sporidiis recte vel oblique
 monostichis, ellipsoideo-oblongis, utrinque rctundatis v. obtuse te-

nuatis, constricto-didymis, 17 ~ 8, fuligineis, extra ascos subinde 2-3-septatis.

Hab. in ramis emortuis *Cydoniæ vulgaris* in Hungaria.

6. **Amphisphæria quinquespora** Schulzer v. Mügg. in Verhandl. zool.-bot. Gesell. Wien (1871) p. 1224 et 1242, t. 13, f. 4 (*libera*) et 22 (*obtecta*). — Peritheciis globosis 300-400 μ . diam. nunc liberis verruculosis nunc peridermio pustulatim elevato tectis, nigris; ascis breviter oblongo-cylindraceis, brevissime-stipitatis 5-sporis filiformi-paraphysatis; sporidiis ellipsoideo-oblongis, constricto-1-septatis, maturis 18-22 ~ 8-9.

Hab. in ramis corticatis et decorticatis *Cydoniæ vulgaris* in Hungaria. — An sporidia semper sint quina in quoque asco, dubitandum.

7. **Amphisphæria Cydoniæ** Schulz. v. Mügg. in Verh. zool.-bot. Ge-sellsch. Wien (1871) p. 1251, t. XIII, f. 31. — Peritheciis gregariis superficialibus, globoso-depressis, non papillatis, poro pertusis, nigris, 300-400 μ . diam.; ascis filiformi-paraphysatis clavatis, apice rotundatis deorsum tenuato-stipitatis, octosporis; sporidiis ellipsoideo-oblongis, utrinque obtusulis, constricto-1-septatis, umbrino-brunneis, 12-16 ~ 4-5, oblique monostichis, vel apice subdistichis.

Hab. in ramis decorticatis *Cydoniæ vulgaris* in Hungaria.

8. **Amphisphæria Heraclei** Noelli, Malp. XIX (1905) p. 360. — Peritheciis sparsis, nigris, in greges minutos coadunatis, v. solitariis, superficialibus, globosis, sursum in ostiolum conicum productis, 300 μ . diam.; ascis cylindraceis, basim versus sæpe curvatis, 48-73 ~ 4-5; paraphysibus filiformibus ascos æquantibus; sporidiis minutis, constricto-1-septatis, fuligineis, non guttulatis, 7-11 ~ 4-5, loculo uno minore et obtusiore.

Hab. in caulinis siccis *Heraclei Sphondylii* in silvis Stu-pinigi, pr. Taurinum Ital. bor. — Verisimiliter forma *Didymo-sphaeræ conoideæ* Niessl — Syll. I p. 702.

9. **Amphisphæria pseudostromatica** Rick, Ann. Mycol. III (1905) p. 240. — Peritheciis innatis, ad medium productis, 1° mm. latis, ostiolo minuto, in substrato longe lateque nigrefacto insidentibus, mycelio subperisporioideo circumdatis, arcte aggregatis, atris; ascis cylindricis, sessilibus, 60 ~ 20, versus apicem angustioribus, octosporis; sporidiis cylindricis, medio septatis, vix constrictis, fuligineis, biguttulatis, distichis, 20-25 ~ 6, paraphysibus multis, ramosis, filiformibus.

Hab. in planta scandente generis *Strychni*, in Brasilia. —
Est affinis *Amphisphaericæ Pseudo-dothideæ* Rehm.

10. **Amphisphaeria ericeti** B. R. S. in Saccardo, Not. Myc. VI, Ann. 3937

Myc. v. III (1905) p. 508. — Peritheciis globulosis, sparsis, innatis dein semi-emergentibus, levibus, 260-300 μ . diam., poro latiusculo apertis, nigris; ascis clavato-cylindraceis, 70-80 \times 9-11, breve noduloso-stipitatis, octosporis; paraphysibus filiformibus ascos superantibus; sporidiis distichis, breve fusoideis, plerumque curvulis, 12-18 \times 4-5, brunneis, medio 1-septatis constrictisque, loculo infero attenuato, supero crassiore et obtusiusculo.

Hab. in ligno canescente Callunæ vulgaris, Calmpthout pr. Anvers Belgii.

11. **Amphisphaeria ulmicola** (Curr.) Sacc. et Trav. - Syll. XIX p. 68 3938

- *Sphaeria ulmicola* Curr. in Trans. Linn. Soc. XXII (1859) p. 321, t. 58. f. 58. — Peritheciis majusculis, globosis, ligno semiimmersis, ostiolo papillato, dein deciduo et porum latum relinquentे; ascis non visis; sporidiis oblongis utrinque obtuse tenuatis, medio constrictis, loculo sup. subinde lenissime crassiore, 22-24 \times 5,5-6,5.

Hab. in ligno Ulmi in Britannia.

12. **Amphisphaeria polymorpha** Rehm ap. Fairm., Proc. Rochest. Ac. 3939

of Sc. IV (1906) p. 222. — Peritheciis dispersis, primitus innatis dein emergentibus, globoso-conoideis, plus minusve elongato-papillatis, atris, glabris, 0,5 mm. diam., ad basim hyphis crebris, ramosis, fuscis 3-4 μ . cr. cbsessis, contextu parenchymatico subcarbonaceo; ascis elongato-fusoideis, apice rotundatis, crasse tunicatis, 210-250 \times 30-35, tetra-octosporis; sporidiis fusoideis, rectis, primitus utrinque acutissimis, episporio crasso instructis, medio septatis, vix constrictis, evanido-guttulatis, 75-80 \times 12-20, distichis; paraphysibus ramosis, septatis, hyalinis, 2 μ . cr.

Hab. ad corticem trunci dejecti prob. Ulmi sp. in silvaticis pr. Lyndonville. — *Polymorpha* dicta quia sec. etatem colore et forma variat.

13. **Amphisphaeria lignicola** (v. Höhn.) Sacc. et Trott., *Didymascina* 3940

lignicola v. Höhn., Ann. Mycol. III (1905) p. 331. — Peritheciis ovoideo-globosis, ligno atrato immersis subsparsis, initio clausis, denique poro rotundo pertusis, 300-400 μ . diam., cinereo-nigris v. nigricantibus; excipulo genuino nullo; ascis copiosis, cylindricis, vix stipitatis, octosporis 100-110 \times 9-10; sporidiis medio 1-septatis, non v. vix constrictis, monostichis, brunneis, oblongo-

ellipsoideis 14-20 \times 6,5-8; paraphysibus copiosis, filiformibus, sursum ramulosis, reticulato-connexis epithecium formantibus.

Hab. in ligno Carpinii Betuli prope Pressbaum in Wiener Wald — cl. v. HÖHNEL hanc speciem æque ac *Amphisphæriam salicicola* Allesch. — Syll. XIV p. 556 (= *Didymosphæria decolorans* Rehm — Syll. XIV p. 553) in genus nōvum (*Didymascina*) primitus erexit et ad Ostropeas retulit, sed posterius delevit (Fragm. IX p. 41).

14. *Amphisphæria nitidula* v. Höhn, Fragm. z. Mycol. III in Sitzsb. 3941

K. Ak. d. Wiss. Wien, Bd. CXVI Abt. I (1907) p. 120. — Peritheciis superficialibus, sparsis v. in greges parvos proximatis, globosis, 260-500 μ . diam., nitide nigris, carbonaceis, distincte rugulosis, ostiolo depresso, 20-25 μ . lato; paraphysibus copiosissimis filiformibus, ascis æquantibus; ascis clavatis, sursum tenuatis, in pedicellum 20-25 μ . longum productis, octosporis, 60 \times 8-9; sporidiis distichis, diu hyalinis, demum cinereo-brunneis, bicellularibus, ad septum obscurius coloratum non constrictis, oblongo-ellipsoideis, utrinque rotundatis, initio pluriguttulatis, tenui-tunicatis. 6-8 \times 3-4.

Hab. in ligno putri Carpinii Betuli, Wiener Wald Austriae. — Videtur affinis *A. sardoe* et *A. deformi*.

15. *Amphisphæria aquatica* Plöttn. et Kirsch., Verh. Bot. Ver. Brandenb. 3942

XLVIII (1906) p. 52. — Peritheciis solitariis v. in greges minutos proximatis, basi lata ligno adnato-sessilibus, sursum conoideis 0,5-0,7 mm. diam., nigris, membranaceis, ; ascis cylindraceis, sessilibus, apice plano-rotundatis, 200 \times 14-18, octosporis; sporidiis ellipsoideis, plerumque irregularibus, utrinque rotundatis v. subacutatis, 2-cellularibus, non v. vix constrictis, dense pluriguttulatis, monostichis, 30-37 \times 8-14; paraphysibus filiformibus, hyalinis.

Hab. in lignis salicinis, aqua diu immersis, in Borussia (Plöttner et Kirschstein).

16. *Amphisphæria Lojkæ* Rehm, Ann. Mycol. IV (1906) p. 261. — 3943

Peritheciis gregariis emergentibus, basi cortice immersis, globulosis, atris, scabriusculis, haud papillatis, poro perspicuo pertusis, carbonaceis, 0,4-1 mm. diam.; ascis clavatis, octosporis filiformi-paraphysatis; sporidiis clavatis, utrinque obtusis, monostichis, sub medio 1-septatis, leniter constrictis, strato mucoso lato obductis, fuscis, 36 \times 12, cellula superiore 21-24 \times 12, inferiore 12 \times 6.

Hab. ad corticem Quercus, Galizinberger pr. Vindobonam (Lojkæ). — Affinis *Amp. inæquali*.

lato; ascis clavatis deorsum breviter tenuato-stipitatis, 110-120 \times 25-32, apice rotundatis, bisporis; sporidiis oblongis, utrinque obtusulis v. apice uno acutulis, constricto-1-septatis, 50-64 \times 24-30, loculis subglobosis, demum secedentibus.

Hab. in ligno putrescente quercino, Havelufer pr. Rathenow Borussiæ.

NEOPECKIA Sacc. — Syll. IX p. 749, XI p. 317, XIV p. 558, XVI p. 506, XVII p. 686.

1. **Neopeckia Bambusæ** v. Höhn. Fragm. z. Myk. VI in Stzb. k. 8952 Ak. d. Wiss. Wien, CXVIII, Abt. I (1909) p. 329. — Peritheciis superficialibus laxe gregariis, carbonaceis, solidis, asperulis, opacis, globosis, supra rotundatis, 400-600 μ . lat., basi hyphis violaceo-brunneis, tortuosis 3-4 μ . cr. cinctis; ascis aparaphysatis, longe pedicellatis, apice truncatis, tenui-tunicatis, octosporis, 120 \times 16; sporidiis bi-triseriatis, diaphane brunneis, oblongo-ellipsoideis, utrinque rotundatis, ad septum leniter constrictis, 16-19 \times 6-7, rectis curvulvis, 2-4-guttulatis.

Hab. ad culmos putrescentes Bambusæ (*Gigantochloë*) sp. in horto botanico, Buitenzorg Javæ. — Status. conidicus simul adest. *Phaeoisaria Bambusæ* v. Höhn. quam cfr.

2. **Neopeckia nobilis** Rick, Broteria V (1906) pag. 44. — Peritheciis 8953 majusculis, 1 mm. diam., orbicularibus v. cylindraceis, superius fuligineis, versus ostiola late apertis, inferius pilis longis $\frac{1}{2}$ mm., fuligineis, simplicibus, 3 μ . latis vestitis; contextu coriaceo-molli; ascis 180 \times 13, breviter pedicellatis, clavatis, octosporis; sporidiis fusoideis, biserialibus, primo hyalinis, demum fuligineis, uniseptatis, in septo parum constrictis, guttulatis, 40-50 \times 12; paraphysibus hyalinis, ramosis, ascis superantibus et obtectibus, 2 μ . latis.

Hab. in ramis putridis, Rio Grande do Sul Brasiliæ. — Species nobilis ab omnibus distincta et discomycetis pilosis accedens. — *Var. calva* Rick, in Theiss., Beih. Bot. Centralbl. Bd. XXVII (1910) Abt. II, p. 398. — A typo differt peritheciis levibus. — Ad cortices Petropolis, Rio Grande do Sul Brasiliæ.

3. **Neopeckia Roberti** Starb., Ascom. Schwed. Chaco-Cordill. Exped. 8954 Arkiv f. Bot. V (1905) p. 16, fig. 11 a-c. — Subitulo longe lateque effuso, ex hyphis rigidis, longissimis, parce septatis, simplicibus interdum paullum fasciculatis, rectis et divergentibus, vix repentibus, 5-9 μ . crassis composito; peritheciis primo gregariis vel confertulis, deinde densissime aggregatis fere crustam valde

effusam formantibus, sphærioideis vel mutua pressione paullum angulatis, vertice appланatis, pilis rigidis, flexuosis, saepe genuflexis, parce deorsum dense septatis, fusco-nigris, ad apicem fragilem hyalinis, hyphis mycelii similibus undique vestitis, nigris, vertice glabro, sordide griseo-rubello, paullum e centro poro pertuso radiatim sulcatulo, denique totis levibus, rugosis, contextu minute globuloso, molliusculæ coriaceo, 300-500 μ . diam.; ascis octosporis, cylindraceo-clavatis, sursum rotundatis, deorsum longe pedicellatis, 94-102 \times 12-14 p. sp.; sporidiis superioribus di-tristichis, inferioribus monostichis, fusoideis, medio constrictulis, septatis, primo hyalinis, deinde pallide fuscescentibus, utrinque obtusiuscule apiculatis, appendicula longiuscula, angusta, hyalina præditis, 32-36 \times 6,5, cum appendice 40-45 μ . longis; paraphysisibus filiformibus flexuosis, ramosissimis, hyalinis, ascos obvallantibus.

Hab. in truncæ mucido in silva primæva, Quinta pr., Laguna de la Brea, Prov. Jujuy Argentina. — *Herpotrichiæ Schiedermayerianæ* affinis videtur, sed sporidiis bilocularibus *Neopeckia* adscribenda.

4. *Neopeckia rhodosticta* (B. et Br.) Sacc. - Syll. XI, 317 - Huc re. 3955 ferenda est, monente quoque cl. v. HöHNEL (qui exempl. meliora javanica communicavit), *Letendræa atrata* Penz. et Sacc. - Syll. XIV p. 646.

LIZONIA Ces. et De Not. — Syll. I p. 574, IX p. 679, XIV p. 538, XVI p. 485.

1. *Lizonia Smilacis* Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 386. 3956
Maculis subrotundis, flavis, centro brunneis, 3-4 mm. lat., dein confluentibus; peritheciis hypophyllis 3-7 coadunatis, 260-290 μ . lat., 320 μ . altis, e mycelio intercellulari pseudo-parenchymatico oriundis, nigris, glabris, brevissime crasse substipitatis, pachydermaticis, ostiolo vix conspicuo 15 μ . alto, poro 10 μ . lato pertuso; nucleo albo; ascis copiose filiformi-paraphysatis, tereti-clavatis, 100 \times 14, octosporis, curvulis, teneris; sporidiis fusoideis, curvulis, levibus, 22-24 \times 4-5, bicellularibus, tunica hyalina dein brunneola.

Hab. in foliis Smilacis sp. pr. Tjisaroea pr. Buitenzorg Java. — Sporidia serius interdum 4-cellularia fiunt.

2. *Lizonia Selaginellæ* Raciborski, Bull. Ac. Sc. Cracovic (1909) p. 386. 3957 — Peritheciis in pseudostromate nigro chordiformi parum evoluto superficialibus, confertim gregariis fere conjunctis, globoso-ovoideis,

250-360 μ . lat., 400 μ . alt., ostiolo minuto depresso præditis, glabris, nigris; ascis aparaphysatis, 120 \times 10, teneris, apice truncato-rotundatis, octosporis; sporidiis monostichis, ovoideis, hyalinis, bicellularibus, 12-17 \times 5, septo vix constrictis, levibus, hyalinis, demum brunneolis.

Hab. in surculis Selaginellæ cupressinæ pr. Salak ins. Javæ. — Sporidia ante germinationem sæpe 4-cellularia fiunt.

ALOYSIELLA Mattir. et Sacc., Annali di Botanica VII (1908) p. 143; Il Ruwenzori (1909) Fungi pag. 5 (Etym. a Principe Aloysio SABAUDIA Aprutii Duce). — Perithecia subiculo dematiaceo incidentia, carbonacea, nigricantia, globosa, umbilicata, superne omnino nuda, non papillata; ascis cylindraceis octosporis, paraphysatis; sporidiis ovoideo-oblongis, 1-septatis, fuligineo-olivaceis. — *Obs.* A *Melanopsamma* differt sporidiis coloratis nec hyalinis, a *Neopeckia* peritheciis nudis, non papillatis; ab utraque quia parasitica et cecidogena.

1. **Aloysiella ruwenzorensis** Matt. et Sacc., Annali di Botanica VII 8958 (1908) p. 143; Il Ruwenzori etc. p. 6, tab. I, fig. 1-7. — Biophila, ramos matrix in formam fusoideam conspicue tumefaciens; subiculo velutino, nigro, æquali, partem matrix incrassatam tantum occupante, hyphis dense stipatis, ascendentibus, simplicibus v. parce ramosis, septatis, non constrictis, apice obtusiusculis, atrofuligineis, 200-300 \times 4-5; conidiis nullis. — Peritheciis in subiculo hinc inde laxe sparsis, immersis, demum emergentibus, 300 μ . diam. et ultra, ex subgloboso-mox depresso-umbilicatis, nigris, glabris, basi subconoidea insertis, ubique pilis subicularibus vestitis, ostiolo latiuscule impresso, non papillato præditis; contextu parenchymatico crassiusculo; ascis cylindraceis brevissime stipatis, apice rotundatis, octosporis, 85-90 \times 8, paraphysibus filiformibus superne dichotomie ramosis, hyalinis obvallatis; sporidiis monostichis v. partim distichis, oblongo-ovoideis, medio 1-septatis, non v. vix constrictis, utrinque obtusiusculis, 16-19 \times 5-6, initio hyalinis, demum olivaceo-fuligineis.

Hab. in ramis vivis Ericæ arboreæ in silvis inter Bihunga et Nakitava usque ad Bujungolo, 1920 ad 3798 m. Ruwenzori, Africa austr.

DELITSCHIELLA Sacc. — Syll. XVII p. 688.

1. **Delitschiella elegans** (Santer.) Sacc. et Trott., *Delitschia elegans* 8959

Santermeister F. L. in Jahresb. Ver. Natk. Würtemb. LXVI p. 399. — Peritheciis generis; ascis sexdecimsporis; sporidiis oblongis 48 \times 16.

Hab. in stercore leporino; sociis *Sordaria bombadioide* et *Sporormia ambigua* pr. Sigmaringen. — A *Delitschiella polyspora* sporidiis paullo minoribus imprimis dignoscitur.

Sect. 6. Hyalophragmiæ.

SPHÆRULINA Sacc. — Syll. II p. 186, IX p. 846, XI p. 336, XIV p. 581, XVI p. 528, XVII p. 692.

1. **Sphaerulina Anemones** Rehm, Ann. Mycol. V (1907) pag. 539. — 3960
Peritheciis in hypophyllo dispersis, sessilibus, globulosis, atris in papillulam minutissimam elongatis, conoideis, 250 μ . alt. et lat. contextu parenchymatico fusco; ascis ovalibus sive piriformibus, lata basi sessilibus, versus apicem angustatis, crasse tunicatis, apice obtusis 200 \times 70, 8-sporis; sporidiis subclavatis, transverse 4-septatis, parte superiore minus longa, sed multo latoe, 1-septata inferiore conoidea 2-septata, quaque cellula gutta magna oleosa instructa, 50-65 \times 20 distichis, hyalinis; paraphysibus nullis.
Hab. in hypophyllo foliorum *Anemones silvestris* prope Arnstadt Thuringiæ (H. Sydow). — *Sphaerulinæ Potentillæ cognata*.
2. **Sphaerulina Oxalidis** Rehm, Ann. Mycol. V (1907) pag. 517. — 3961
Peritheciis in cortice late denigrato gregarie innatis eumque protrudentibus, globosis, papillula minima modo prominente, 0,2 mm. diam., excipulo tenuissime parenchymatico fuscidulo; ascis oblongo-fusiformibus, sessilibus, 40-50 \times 9-10 octosporis; sporidiis oblongis, utrinque rotundatis, haud constrictis, medio 1-septatis, utraque cellula 1-guttata, hyalinis, strato tenui mucoso obductis, 10-12 \times 2,5-3 distichis; paraphysibus nullis.
Hab. ad ramulos *Oxalidis strictæ*, Texas (LONG jr., comm. ATKINSON). — An *Didymella* sp.? sed paraphyses nullæ observante cl. Rehm; sed cur non potius *Sphaerellæ* sp.?

3. **Sphaerulina? Hamadryadum** Spez., An. Mus. Nac. Buenos Aires 3962 t. XIX (1909) p. 373. — Peritheciis epiphyllis innato-erumpentibus, hinc inde matrice arescente cinerescente leniter nigrificata insidentibus, ex hemisphaericō subconoideis, 90-120 μ . diam., pilis

unicellularibus 20-30 \times 5, olivaceis, laxe adspersis; ascis clavulatis brevissime pedicellatis, aparaphysatis, octosporis, 70-80 \times 14-16; sporidiis oblique distichis rectis v. lenissime subcurvulis, e cylindraceo subclavulatis, 24-26 \times 6-7, semper hyalinis, primo 4-blastis dein 1-septatis, postremo obsolete 3-septatis.

Hab. ad folia arida Hamadryadis Kingi prope Lago Blanco, Patagonia Amer. austr.

4. *Sphærulina Potebniae* Sacc., in Potebnia, Myc. St., Ann. Myc. V 3963 (1907) p. 13, fig. 22, Trav. Soc. Nat. Univ. Kharkow XXXXVIII

(1907) pag. 61. — Peritheciis gregariis superficialibus 70-100 μ , sphæroideis; ascis cæspitosis ovoideo-cylindraceis, 40-50 \times 10-17; paraphysibus nullis; sporidiis distichis, initio bilocularibus, hyalinis, dein triseptatis, pallide viridi-flavis, 12-14 \times 4,5-5.

Hab. in ramis Piri communis prope Koursk Stadt Rylsk Poloniae

5. *Sphærulina Saccardiana* Potebnia, Myc. St., Ann. Myc. V (1907), 3964 p. 14 fig. 23 et Trav. Soc. Nat. Univers. Kharkow XXXXVIII

(1907) pag. 61. — Peritheciis 170-200 μ . cr.; ascis cylindraceis 85 \times 9-10, paraphysibus destitutis; sporidiis distichis, flavidis 22-26 \times 6-7, 6-7-septatis, medio constrictis, raro longitudinaliter et imperfecte septatis.

Hab. in ramis Piri Mali, socio *Fusicocco microsporo*, prope Koursk Poloniae.

6. *Sphærulina Rehmiana* Jaap, Fungi sel. exsicc. n. 318 a, b; Abh. 3965 Bot. Ver. Prov. Brandenb. LII (1910) Extr. p. 10. — Peritheciis

amphigenis gregariis, saepius epiphyllis, erumpentibus, globoso-depressis, 100-150 μ diam., poro pertusis, brunneo-nigris; ascis fasciculatis, aparaphysatis, tereti-fusoideis v. clavatis, apice acutato-rotundatis, 50-60 \times 6-7, senio elongatis et curvatis, octosporis; sporidiis tereti-fusoideis, obtusis, hyalinis, 2-4-cellularibus, di-tristichis, parallele dispositis, 30-50 \times 2,5-3,5.

Hab. in foliis Rosæ centifoliæ, socio statu conidico *Phleospora Rosæ* (Desm.) v. Höhn., prope Triglitz Germaniae. — *Sphaerulina myriadea* subaffinis.

7. *Sphærulina Verbæ* Speg., An. Mus. Nac. Buenos Aires t. XVII 3966 (1908) p. 124, cum icono. — Peritheciis laxe gregariis, hypophyllis, subepidermicis, 100-150 μ . diam., subcarbonaceis poro rotundo pertusis; ascis clavulatis modice tenuiterque pedicellatis aparaphysatis 80-90 μ long., parte sp. 50-60 \times 12-14, pedicello 30-40 \times 1,5-2, octosporis; sporidiis congregatis ellipsoideo-cylindraceis, medio in-

crassatis, utrinque obtusissimis, rotundatis, per ætatem biseptatis, 12-18 \times 4-6, semper hyalinis.

Hab. vulgata ad folia dejecta putrescentia, Ilicis paraguariensis, Argentina, Amer. austr.

- 8 *Sphaerulina plantaginea* Rehm, Ascom. exsicc. fasc. 42, n. 1793; 3967 Ann. Myc. VI (1908) p. 489. — Peritheciis in maculis epiphyllis orbicularibus, 2-3 mm. lat. gregariis, demum arcte congregatis, innatis, globosis, poro pertusis, glabris, nigris, 120-130 μ ., humidis emergentibus, excipulo crasso fusco parenchymatice contexto; ascis clavatis, apice rotundatis, crasse tunicatis, 70-80 \times 18-20, octosporis; sporidiis primitus obtusis clavatis et strato hyalino obductis, 1-3-septatis, hyalinis, demum subfusoideis, medio subconstrictis, extra ascum dilute fuscidulis, 20-30 \times 8-9, distichis; paraphisibus subramosis.

Hab. in foliis vivis Plantaginis, Sao Leopoldo, Rio Grande do Sul, Brasilia (RICK).

9. *Sphaerulina Valerianæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 3968 (1909), p. 374. — Peritheciis saepius epiphyllis maculis vagis indeterminatis 3-5 mm. diam, laxe pauci-insidentibus, lenticularibus, 100 μ . diam.; ascis clavatis 3-4 tantum in quoque perithecio, apophysatis, brevissime pedicellatis 60 \times 20, octosporis; sporidiis subclavulatis 22 \times 16, primo 1-septatis dein 4-septatis, hyalinis, tunica tenuissima mucosa concolore diu vestitis.

Hab. ad folia languida Valerianæ megalorrhizæ secus Rio Blanco Tucuman, Rep. Argentina.

10. *Sphaerulina Taxi* Massee, Diseases, cultiv. Plants (1910) pag. 220, 3969 fig. 63. — Peritheciis gregariis epidermide pustulata tectis, globo-so-lenticularibus, nigris, ostio breviter papillato erumpente; ascis elongato-clavatis, apice incrassatis, 65-75 \times 12-14, apophysatis; sporidiis mono-distichis anguste ellipsoideis, utrinque acutiusculis, hyalinis, diu 1-septatis, denique 3-septatis, 16-22 \times 5.

Hab. in foliis Taxi baccatæ, quam valde vexat et denique necat, Cornwall et Yorkshire Britanniae.

11. *Sphaerulina paulistana* Speg., Fungi Paulist., Rev. Mus. La Plata 3970 t. XV (1908) p. 22. — Maculis maximis repando-sinuosis, linea callosa fuscescente limitatis, amphigenis, cinereo-albescentibus, lineis pallidioribus subcircinantibus notatis; peritheciis saepius epiphyllis laxissime gregariis, inordinatis, epidermide tectis, ostio papillulato pertuso perforatis 120-150 μ . diam.; membranaceis, contextu parenchymatico fusco-fuligineo; ascis antice longiusculæ

attentiatis acute rotundatis crassiusculeque tunicatis, postice subrotundatis brevissime crasseque pedicellatis 55-60 \times 12, octosporis; sporidiis ellipsoideo-elongatis, leniter inaequilateralibus, utrinque acutiuscule rotundatis, 20 \times 4, 3-septatis, hyalinis, oblique di- vel tri-stichis.

Hab. ad folia languida Dracænae cujusdam in hortis, Sao Paulo, Brasilia (USTERI).

12. *Sphærulina?* *Echmeæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 3971 (1909) p. 373. — Maculis saepius hypophyllis suborbicularibus indeterminatis pallidissime olivascéntibus; peritheciis innatis per epidermidem erumpentibus, subglobosis 100-120 μ . diam., glabris, atris, ostiolo latissimo 20 μ . diam., impresso perforatis; ascis clavatis paraphysatis breviter crassiusculeque pedicellatis octosporis, 60-80 \times 12-15; sporidiis fusoidis primo continuis serius 1-3-septatis postremo obsolete 5-septatis, 20-28 \times 4, semper hyalinis, per ætatem saepius utrinque cauda (promycelio?) concolore breviore ornatiss.

Hab. ad folia viva *Echmeæ polystachyæ* prope Formosa, Argentina Amer. austr.

13. *Sphærulina Pleuropogonis* Rostr. Rep. second. norweg. arctic 3972 Exped. Fram., in Vidensk. Selsk. i Kristiania (1906) pag. 7. — Peritheciis gregariis, vaginicolis, fuscis; ascis clavato-fusoideis, 55-65 \times 10-12, aparaphysatis; sporidiis cylindraceis, utrinque obtusis, hyalinis v. pallide flavescentibus, 19-20 \times 5-6, oblique monostichis.

Hab. in vaginis *Pleuropogon is Sabinei*, Fram's Fjord Norvegiae.

14. *Sphærulina subtropica* Speg., An. Mus. Nac. Buenos Aires t. XIX 3973 (1909) p. 374. — Peritheciis sparsis lenticularibus, 120-150 μ . diam., subepidermicis, ostiolo umbilicato 30 μ . diam. pertusis; ascis subfusoideis brevissime noduloseque pedicellatis, 75-80 \times 12, semper plane aparaphysatis, octosporis; sporidiis subfusoideis, 16-20 \times 4-5, saepius leniter subnavicularibus, primo continuis dein 2-4-blastis, postremo 3-septatis, semper hyalinis.

Hab. ad glumas rachidesque *Paspali* dilatati in pratis prope Tucuman, Argentina Amer. austr.

15. *Sphærulina Oryzae* Y. Miyabe, Pilze Reispfl. Japan, Journ. Col. lege Agricult. Tokyo, II (1910) p. 245, t. XIII, p. 12-14 (fig. 12 ex errore fucata). — Peritheciis nigro-brunneis immersis papilliformi-prominulis ibique obscurioribus, globosis v. ellipsoideis 65-125 μ . diam. 47-75 μ . altis; ascis numerosis, crebris, clavatis vel

elongatis plerumque subincurvatis, 40-60 \times 10-13, octosporis; sporidiis distichis, fusoideis, utrinque acutatis, quadrilocularibus, non constrictis, 15-20 \times 3-5.

Hab. in foliis *Oryzae sativæ* in Japonia.

METASPHÆRIA Sacc. — Syll. II p. 156, IX p. 825, XI p. 333, XIV p. 582, XVI p. 529, XVII p. 695.

1. **Metaspæria rubicola** Karst., Acta Soc. pro Fauna et Fl. fenn. 3975 XXVII (1905) p. 13. — Peritheciis gregariis, primo epidermide tectis, dein, ea secessa, liberis, sphæroideis, poro pertusis, atris, minutis; sporidiis longe fusoideis, curvulis, 4-6guttulatis, hyalinis, circ. 40 \times 3.

Hab. in caulinibus siccis Rubi idæi in regione Kuopioënsi, Kasurila Fennia (O. LÖNNBOHM).

2. **Metaspæria longispora** Kirschst., Verh. Bot. Ver. Brandenburg XLVIII (1906) p. 54. — Peritheciis sparsis v. gregariis subcorticis sed cortice disrupta demum nudatis, sensim in ostiolum papilliforme tenuatis, nigris, coriaceis, usque ad 0,5 mm. diam.; ascis cylindraceo-clavatis, pedicellato-acutatis, supra rotundatis, 120-140 \times 5-7, octosporis; sporidiis hyalinis, elongato-fusoideis, utrinque acutatis, multiseptatis (plerumque 10), non constrictis, 30-40 \times 4-5; paraphysibus filiformibus, hyalinis.

Hab. in sarmentis Rubi fruticosi prope Rathenow Potsdam Germaniae.

3. **Metaspæria viticola** Speg., An. Mus. Nac. Buenos Aires t. XIX 3977 (1909) p. 377. — Peritheciis erumpenti-superficialibus valide papillato-ostiolatis, subconferte gregariis, seriatis, carbonaceis 150-180 μ . diam.; ascis clavulatis dense paraphysatis breviusculae pedicellatis, 90-100 \times 8-12, octosporis; sporidiis elongato-fusoideis, 3-5-septatis, septo medio constrictulis, 18-22 \times 5, hyalinis, guttulatis.

Hab. ad sarmenta arida Vitis cordifoliae in horto La Plata Argentina Amer. austr.

4. **Metaspæria Lonicerae** Fautr. — Syll. IX p. 335, XI p. 333 - f. 3978 **Berberidis** Rehm in Jaap, Ann. Mycol. (1908) p. 211.

Hab. in ramis tenellis Berberidis vulgaris, pr. S. Ulrich Tiroliae. — A typo in *Lonicera* morphologicæ vix differt.

5. **Metaspæria Dianthi** Rostr. Myk. Meddel. IX p. 311 (1905) in Bot. Tidsskr. — Peritheciis sparsis, primo epidermide tectis, sphæroideis, atris 0,3 mm. latis; ascis tereti-clavulatis, breve stipitatis, paraphysatis, 70 \times 12-13; sporidiis oblique monostichis, oblongo-

fusoideis, 4-septatis, ad septa constrictis, 24-38 \approx 7-8, hyalinis, loculis guttulatis.

Hab. in caulibus *Dianthi superbi*, Sjælland, Flaskekroen Dania.

6. **Metasphæria Lyndonvillæ** Fairman, Ann. Mycol. IV (1906) p. 328. 3980
 — Peritheciis sparsis, erumpenti-superficialibus, minutis, atris; ascis clavatis, apice late rotundatis, breve stipitatis, octosporis, 60-75 \approx 15-16; sporidiis distichis, oblongo-fusiformibus, rectis vel curvulis, 4-7-septatis, subconstrictis, loculis 1-2-guttulatis, 30-35 \approx 6-7 μ ., hyalinis.

Hab. in interiore leguminum *Robiniae Pseudacaciæ*, Lyndenville N. Y. Amer. bor.

7. **Metasphæria leguminosa** Fairman, An. Mycol. IV (1906) p. 328. 3981
 fig. 4. — Peritheciis sparsis, minutis, superficialibus, atris; ascis oblongo-clavatis, breve stipitatis, paraphysibus sursum tenuiter clavulato-incrassatis, 8-sporis, 60-70 \approx 15-18; sporidiis distichis, lanceolato-fusoideis, primo granulosis et nucleolatis, deinde 7-septatis, loculis intermediis incrassatis, hyalinis, 20-23 \approx 3-4.

Hab. in interiore leguminum *Robiniae Pseudocaciæ*, Lyndenville N. Y. Amer. bor.

8. **Metasphæria Mate** Speg., Ann. Mus. Nac. Buenos Aires t. XVII (1908) p. 126. — Peritheciis subepidermicis densiuscule gregariis, lenticularibus, glabris, subcarbonaceis, ostiolato-papillatis, 150 μ . diam.; ascis cylindraceis breviuscule pedicellatis, 120 \approx 10, pseudo-paraphysibus paucis subfiliformibus granuloso-farctis commixtis; sporidiis elongato-ellipsoideis, triseptatis vix ad medium constrictulis, hyalinis demum subchlorinis.

Hab. ad ramos languidos *Ilicis paraguariensis* in silvosis circa Campo dos Cuias, Rep. Argentinæ Amer. austr.

9. **Metasphæria valdiviensis** Speg., Fungi Chilenses (1910) p. 73. — 3988
 — Peritheciis numerosis, laxe gregariis, cortice insidentibus, epidermide velatis, lenticularibus, minutis, subcarbonaceis, ostiolo impresso perforatis, 150 μ . diam.; ascis subcylindraceis brevissime crassiuscule noduloseque pedicellatis, octosporis, paraphysatis, 85-90 \approx 14-15; sporidiis hyalinis ellipsoideo-fusoideis, 3-septatis, ad septum medium constrictulis, mediocribus 26 \approx 6.

Hab. in ramis siccis *Persea Lingue*, prope Ciudad de Valdivia, Chile Amer. austr.

10. **Metasphæria Coffæ** Rehm, Ann. Mycol. VII (1909) p. 537. — 3984
 — Peritheciis in epiphylo dispersis, innatis demum convexo-pro-

minentibus, atris, poro pertusis, senilibus umbilicatis, sæpe margine tenuissimo nigrescente cinctis, 0,15 mm. diam.; ascis clavatis, apice rotundatis et incrassatis, 40-45 \times 15, octosporis, J-; sporidiis fusiformibus v. subclavatis, utrinque acutatis, 3-septatis, hyalinis, 15-20 \times 5, di-tristichis; paraphysibus filiformibus, septatis, 4 μ . cr.

Hab. ad folia Coffeæ arabicæ, São Leopoldo, Rio Grande do Sul Brasiliæ (THEISSEN S. J.). — Pseudostromate nigrescente ad *Hypospilum* nutat.

11. **Metasphæria ericina** v. Tubeuf, in Rehm, Ann. Mycol. V (1907). 898
p. 541. — Peritheciis epiphyllis, gregariis, innatis, peridermio nigrato tectis, globosis, poro conspicuo pertusis, glabris c. 250 μ . diam.; ascis oblongo-clavatis, sessilibus 80 \times 12-14, 8-sporis; sporidiis fusoideis, rectis, 3-septatis, ad septa subconstrictis, strato tenui mucoso obductis, hyalinis, 22-25 \times 6-7, distichis; paraphysibus ramosis, septatis, hyalinis.

Hab. ad folia decidua Ericæ carneæ, Seiser-Alpe Tiroliæ austr. (Dr. v. TUBEUF).

12. **Metasphæria tetrasperma** Koord., Botan. Untersuch. (1907) p. 192, 898
fig. 17, II. — Peritheciis corticolis, tectis, globosis, ostiolo conico erumpente, coriaceis, glabris, 0,5 mm. diam., sparsis, atris; ascis cylindraceis 60 \times 5,5, tenui tunicatis, apice haud incrassatis, tetrasporis, paraphysatis; sporidiis oblique monostichis, hyalinis, fusoideo-oblongis, utrinque acutis, 23-24 \times 5-6,5, triseptatis; paraphysibus ascos superantibus, filiformibus, vix 1 μ . cr., hyalinis.

Hab. in cortice vulnerato Fici elasticæ prope Karang-gaja in ins. Java (KOORDEES).

13. **Metasphæria vagans** Feltg., Vorstud. Pilzfl. Luxembg. Nachtr. IV (1905) p. 36. — Peritheciis gregariis cortice brunnescente insidentibus epidermide tectis, nigris, 100-150-200 μ ; ascis pisciformibus, octosporis, 54-70 \times 9-11, paraphysibus filiformibus obsitatis; sporidiis fusoideis obtusulis, rectis v. curvulis, quadriguttulatis, uni- v. quadrilocularibus, ad septa non constrictis, 13-16 \times 3 (immaturis).

Hab. in cortice sicco Ilicis Aquifolii, Höhenhof Luxemburgia.

14. ? **Metasphæria nigrescens** (Bonord.) Sacc. et Trav. - Syll. XX, 898
p. 78 - *Hercospora nigrescens* Bon. Handb. p. 63, t. III, fig. 72. —
— Peritheciis immersis, globulosis, discretis, ostiolo minuto erumpentibus, excipulo tenuissimo (nullo sec. Bon.) basi hypostromate

celluloso sufflito; ascis tereti-clavatis sensim tenuato-stipitatis, octosporis, apice rotundatis, paraphysibus ramosis obvallatis; sporidiis oblique monostichis oblongo-ellipsoideis, utrinque obtuse rotundatis, constricto-3-septatis, 4-guttulatis, hyalinis, dein in circum albidum expulsis.

Hab. in lignis, in Germania. Substantia lignea præcipue circa perithecia nigrescit. — Species dubia et vix *Metasphæria*.

15. *Metasphæria?* *Spegazzinii* Sacc. et Trott., *Metasphæria?* *Cocœs* 3989 *Speg.*, An. Mus. Nac. Buenos Aires t. XIX (1909) p. 375, non Petch — Peritheciis primo epidermide velatis eaque secedente denudato-subsuperficialibus, lenticularibus, 150-200 μ . diam., vix paillulato-ostiolatis, glabris; ascis subclavulatis breviter pedicellatis 100 \approx 16-18, a paraphysatis vel paraphysibus paucissimis cinctis, octosporis; sporidiis oblique distichis, primo didymis, biconoideis subnavicularibus, 4-guttulatis, 18-22 \approx 5-6, serius triseptatis, medio præcipue constrictulis, eguttulatis, semper hyalinis.

Hab. ad spathas aridas Cocoës Romanzoffianæ in horis La Plata, Argentina Amer. austr.

16. *Metasphæria Cocoes* Petch, Ann. R. Bot. Gard. Peradeniya, IV 3990 Pt. V (1909) p. 304, non Speg. — Peritheciis 0,3 mm. diam., sphæroideis, gregariis, membranaceis, nigris, subcutaneis et epidermidem cinerescentem deique reticulatim sublevantibus; ostiolis minutis fere inconspicuis; ascis 260 \approx 15, utrinque attenuatis, apice rotundatis, breviter pedicellatis, octosporis; paraphysibus nullis; sporidiis oblique monostichis, fusoideis, curvatis, utrinque obtusis, hyalinis, multiseptatis, 85-100 \approx 5.

Hab. ad rhachidem foliorum Cocoës nuciferæ, Ceylon.

17. *Metasphæria Scindapsi* Raciborski, Bull. Ac. Sc. Cracovie (1909) 3991 p. 389. — Maculis epiphyllis flavo-virentibus, subrotundatis, confluentibus, 2-5 cm. latis, non acute limitatis; peritheciis punctiformibus circinantibus, immersis, brunneis, 180 μ . diam., apice depresso, non prominentibus, minute ostiolatis; paraphysibus filiformibus demum mucosis; ascis breviter ovoideo-cylindraceis, basim versus crassioribus, apice angustatis obtusatis, medio 18-20 μ . lat., 70-80 μ . long., octosporis; sporidiis elongatis, levibus, hyalinis, quadrilocularibus, 38-42 \approx 5, rectis v. curvulis, utrinque angustatis.

Hab. in foliis Scindapsi specierum scandentium ad Gedeh in ins. Java.

18. *Metasphæria Puyæ* Speg., Fungi Chilenses (1910) pag. 72, cum 3992 icon. — Peritheciis subepidermiciis laxe gregariis lenticulari-sub-

conoideis, vix papillato-ostiolatis, parvulis, atris, submembranaceis, 130-150 μ . diam.; ascis sublanceolatis, apice obtusis, elongato-sterilibus crasseque tunicatis, basi brevissime noduloseque pedicellatis, paraphysatis, 50-55 \times 16, octosporis; sporidiis subfusoideis, parum infra medium septato-constrictulis, loculo supero transverse bisep-tato, infero minore saepe 1-septato tantum, hyalinis, 20 \times 5-6.

Hab. in foliis emortuis, putrescentibus Puyæ cærulescen-tis, Cerro S. Cristobal de Santjago, Chile Amer. austr.

19. **Metasphæria Aloës** Trinchieri, Rend. R. Ac. Sc. Fis. Mat. Na-polii (1909) fasc. 3-4 martio-aprili, p. 88. — Peritheciis valde copiosis, dense gregariis, subcutaneo-erumpentibus, globosis vel glo-boso-depressis, atris, poro pertusis, 159-232,5 μ . diam., 159-208 μ . altis; excipulo crasso, duro, subcarbonaceo; ascis cylindraceis, rarius cylindraceo-clavatis, apice rotundatis, subpedicellatis, 8-sporis, 53,5-98 \times 9,5-14,5; sporidiis distichis, elliptico-fusoideis, utrinque rotundatis, 3-5-septatis, ad septa, præcipue ad medium, fortiter constrictis, 17-24,5 \times 4,5-7, hyalinis, guttis 4-7-10 irregulariter di-spositis, magnitudine varia; paraphysisibus numerosissimis, manifes-tis, ascos subæquantibus, rectis curvulisque, basi breve articula-tis incrassatisque, superne filiformibus acutiusculisque, hyalinis, 61-95,5 \times 4,5.

Hab. in scapis sicois Aloës plicatilis (L.) Mill., in Horto regio botanico neapolitano Ital. aust. (TRINCHIERI).

20. **Metasphæria Yuccæ** Earle, Bull. of the New York Bot. Gard. 3994 (1904) p. 293. — Peritheciis sparsis, nigris, prominentibus, longis, epidermide tectis, demum suberumpentibus, circ. 200 μ . diam., ostiolo inconspicuo, subpapillato; ascis ellipsoideis, circ. 75 \times 12; paraphysisibus copiosis, filiformibus; sporidiis distichis, hyalinis, an-guste ovoideis, apice acutis, 4-septatis, septis mediis fortiter con-strictis, circ. 20 \times 6.

Hab. in foliis emortuis Yuccæ sp., Stanford Univ. Califor-n. Amer. bor. (C. F. BAKER).

21. **Metasphæria crassiuscula** Sacc. et Briard, Fl. de l'Aube p. 314, 8995 (1888); Berl. Icon. fung. I, p. 144, t. 160, fig. 3. — Peritheciis innatis, sparsis in areis pallidis plus minus approximatis, globulosis, $^{1\frac{1}{6}}_{\frac{1}{5}}$ mm. diam., serius erumpentibus, breve papillatis; ascis crasse clavatis, brevissime noduloso-stipitatis, apice rotundatis, fi-liformi-paraphysatis, octosporis, 60-75 \times 20-24; sporidiis subdisti-chis, oblongo-ovoideis, utrinque obtusis, 5-7-septatis, non v. vix constrictis, hyalinis, 22-26 \times 8-9, subinde inæquilateris.

Hab. in calamis putrescentibus *Junci* sp. pr. Gérosdot Galliae (P. HARIOT).

22. **Metasphæria sepalorum** Vleugel, Svensk Botan. Tidskr. II (1908) 3996 p. 369, fig. 2, a, b. — Peritheciis præcipue in pagina exteriore sepalorum dense gregariis, minutis, 0,4 mm. long. 0,3 mm. lat., sphæroideo-conoideis, papillatis, sessilibus, nigris, nitidis; ascis sphæroideo-cylindraceis, sursum paullo incrassatis, 70-92 \times 9-14; sporidiis distichis, oblongo-ellipsoideis, utrinque rotundatis, inæquilateralibus, 4-locularibus, medio leniter constrictis, 20-24 \times 7-8.

Hab. in sepalis emortuis *Junci* filiformis, in insul. Holmön, Suecia.

23. **Metasphæria Lepidospermatis** Mac Alp. Austral. Fungi, Dec. I-II, 39 p. 376 (Proceed. Linn. Soc. New. S. Wal. 1902). — Peritheciis dense seriatis, saepius maculis nigris insertis, punctiformibus, nigris, membranaceis, poro pertusis, per stomata erumpentibus, 72 μ . diam.; ascis teneris fragilibusque, tereti-clavatis apice incrassatis rotundatisque, deorsum tenuatis, 86-90 \times 13-15, tenui-paraphysatis; sporidiis distichis elongato-fusoideis v. elongato-clavulatis, leviter curvis, typice 3-septatis, non constrictis, 25-26 \times 6,5-7, hyalinis demum submelleis, septo medio distinctiore.

Hab. in caule *Lepidospermatis* sp. Werribee Vic. Australię (C. FRENCH jun.).

24. **Metasphæria Staritzii** Rehm, Ann. Mycol. V (1907) p. 541. — 3996 Peritheciis gregariis immersis globulosis, glabris, nigris ostiolo minutissimo prominentibus, 100 μ . diam., contextu membranaceo fusco; ascis clavatis, 120 \times 15 octosporis; sporidiis fusiformibus rectis, transverse 5-7-septatis, haud constrictis, quaque cellula 1-guttata, hyalinis, 30-35 \times 6-7, distichis, paraphysibus paucis, septatis, 3 μ . cr.

Hab. ad folia *Caricis hirtæ* prope Ziebigk Dessau Germaniae (STARITZ). — Pluribus speciebus caricicolis cognata, tamen ab omnibus bene distincta.

25. **Metasphæria Usteri** Spegazz., Fungi Paulist., Rev. Mus. La Plata 3999 t. XV (1908) p. 23. — Maculis amphigenis, primo totis obscure sanguineis, parvis, dein longiusculis 10-30 \times 2-4 mm., pallidioribus subindeterminatis, centro arescenti-pallescensibus; peritheciis amphigenis in centro macularum sparsis, primo epidermide tectis dein erumpentibus, subglobosis, 90-120 μ . diam., ostiolo minuto vix papillato perforatis, tenui-membranaceis; contextu dense minuteque parenchymatico fuligineo; ascis e cylindraceo lenissime obclavulatis

60 \times 12, apice obtuse rotundatis crasseque tunicatis, basi brevissime noduloseque pedicellatis, paraphysibus tenuibus longioribus densiusculis obvallatis; sporidiis oblique distichis, subfusiformibus, primitus subtorulosis grosse 6-guttulatis, dein 5-septatis, ad septum medium tantum constrictis, utrinque acutiusculis 20 \times 4, hyalinis.

Hab. ad folia languida Sacchari officinarum in cultis, Ercilia Brasilæ (USTERI).

26. **Metaspæria arenaria** B. R. S. in Sacc., Not. Myc. VI, Ann. 4000 Myc. v. III (1905) pag. 509. — Peritheciis globosis, subcarbonaceis, seriatim erumpentibus, 300 μ . diam., dehiscentibus, basi hyphis repentibus parce septatis, fuliginosis, 4 μ . cr., elongatis, scabris cinetis; ascis tereti-clavulatis noduloso-stipitatis, 90-150 \times 14-16, octosporis; paraphysibus cohærentibus, articulatis, 5,5 \times 7 μ . cr.; sporidiis distichis, lanceolato-fusoideis, initio 1-septatis, denique 3-septatis constrictisque, hyalinis, 39-42 \times 6-6,5 loculis, 2-guttulatis.

Hab. in culmis Elymi arenarii, La Panne pr. Furnes et Knocke pr. Heyst, in Belgio (MARIA ROUSSEAU).

27. **Metaspæria Scirpi** Berl. Icon. Fung. I, p. 139, tab. 153, fig. 1, 4001 Sacc. Syll. II, pag. 59 (sub *M. vagans* Karst. f. *Scirpi* Sacc.) — forma **Phragmitis** Rehm, Ann. Mycol. V (1907) p. 541. — Peritheciis in maculis latis fuscidulis gregariis primitus innatis, dein semigloboso-prominentibus, globulosis, nigris, glabris, contextu parenchymatico, 0,3 mm. diam., poro minutissimo pertusis; ascis clavatis, apice rotundatis 4-8-sporis, 100-110 \times 20; sporidiis fusiformibus, rectis, subobtusis, hyalinis, 3-septatis, 40 \times 6-7, distichis; paraphysibus subramosis, hyalinis, 3 μ . crassis.

Hab. ad culmos putrescentes Phragmitis communis in lacu Staffelsee prope Murnau alpium Bavariae (Dr. REHM). — Præcipue a typo sporidiis eguttatis distincta.

28. **Metaspæria saccharicola** Spég., An. Mus. Nac. Buenos Aires 4002 t. XIX (1909) pag. 376. — Matrice tota sordide cinerescenti-infusata; peritheciis laxe gregariis erumpenti-superficialibus subconoides 150-180 μ . diam., minute sed acutiuscule papillato-ostiolatis; ascis subcylindraceis, breviter pedicellatis 100-110 \times 20, octosporis, paraphysibus paucis filiformibus obvallatis; sporidiis elongato-fusoideis, saepius tristichis leviter curvulis, 45-50 \times 7-8, 7-septatis, ad septa, ad medium validius, constrictulatis, loculis grosse 1-guttulatis, diu hyalinis.

Hab. ad culmos dejectos putrescentes Sacchari officina-

rum in campis prope Ledesma, Argentina Amer. Austr. — Cum *Leptosphaeria Spegazzinii* Syd. e Sacc. non comparanda.

29. *Metasphaeria pamparum* Spegazz. An. Mus. Nac. Buenos Aires 4008 t. XIX (1909) p. 375. — Peritheciis innato-erumpentibus, in partibus saepius arescenti-cinerescentibus sparsis, subglobulosis 100-120 μ . diam., ostiolo carbonaceo non v. vix exerto coronatis; ascis cylindraceis, abrupte in pedicellum brevissimum nodulosumque contractis, 60-70 \approx 10-12, paraphysibus filiformibus longioribus parciis obvallatis, octosporis; sporidiis fusoideis 20-22 \approx 4, 7-septatis, tenuiter hyalino-tunicatis, guttulatis.

Hab. ad folia culmosque aridos Aristidæ cujusdam prope Colonia Juarez Celman Rep. Argentina Amer. austr.

30. *Metasphaeria Equiseti* Jaap in Abhandl. Bot. Ver. Brandenb. LII 4004 (1910) p. 143. — Peritheciis gregariis, punctiformibus, nigris, immersis, epidermide tectis dein ostiolo prominentibus, globosis, 150-250 μ . diam., ostiolo obtuse conoideo; ascis cylindraceo-clavatis, supra attenuatis obtusisque, sessilibus, 50-70 \approx 8-9, tetrasporis; J-; sporidiis oblique monostichis, hyalinis, elongato-fusoideis, 17-22 \approx 4-5, bi- dein quadrilocularibus, guttulatis, loculo medio subbreviore; paraphysibus hyalinis, septatis, curvis 3-6 μ . cr.

Hab. in caulis vetustis Equiseti (Heleocharidis?) prope Triglitz in Germania. — Ob ascos tetrasporos prædistincta species.

31. *Metasphaeria paulistana* Speg., Fungi Paulist., Rev. Mus. La Plata 4005 t. XV (1908) p. 23. — Maculis parvulis 3-4 mm. diam. determinatis suborbicularibus, ad hypophyllum saepius epidermide vestitis, ad epiphyllum epidermide orbatis; peritheciis paucis in quaque macula, hypophyllis, e globoso-hemisphaericis, 120-150 μ . diam., papillulato-ostiolatis, contextu indistincte olivaceo; ascis antice attenuato-rotundatis, subcrassiuscule tunicatis, postice cuneatis, sensim in pedicello gracili attenuatis 60 \approx 6-7, paraphysibus conspicue, longioribus, gracillimis densiuscule obvallatis; sporidiis rectis v. oblique distichis, non v. levissime curvulis, polo supero obtusiore infero acutiore, 10-12 \approx 2-2,5 ad septum non constrictis, primo 4-blastis dein triseptatis hyalinis.

Hab. ad folia languida coriacea ignota, Agua branca, Isolamento, Sao Paulo Brasilia (USTERT).

32. *Metasphaeria javensis* v. Höhn., Stzb. K. Ak. d. Wiss. Wien 4006 CXVIII, Abt. I (1909) p. 328. — Peritheciis gregariis, immerso-prominentibus, subtus globosis supra conoideis, ostiolo rotun-

dato, nigris, 200-300 μ . latis, parietibus supra usque ad 40 μ . cr., nigro-brunneis, opacis, basi tenuioribus pallidis; paraphysibus numerosissimis filiformibus 2-3 μ . cr. non mucosis; ascis tenuiter tunicatis, medio latioribus supra subtruncatis, octosporis, basi in pedicellum breviter tenuatis, 110 \times 12; sporidiis submonostichis, hyalinis, tenuiter tunicatis, elongatis, utrinque subangustatis rotundatisque, subsexocularibus, medio tenuiter tunicatis, non constrictis, 24-26 \times 6.

Hab. in cortice levi arborum, Tjiburrum prope Tjibodas in ins. Java.

34. **Metaspheeria aquatica** Patouill., Bull. Soc. Myc. Fr. XXIV (1908) 4007

p. 10. — Peritheciis atris, innatis, globosis, circiter 120 μ . diam., ostiolo brevi obtuseque conoideo v. plus minus cylindraceo-elongato pertuso vix erumpente, tenuiter membranaceis carnosulis, pilis sparsis, brunneis, 3-4 μ . latis, septatis, flexuosis, mollibus, parenchymate thalli radiantibus vestitis; ascis cylindraceis, apice rotundatis deorsum attenuato-stipitatis 110-130 \times 20, a paraphysatis, 8-sporis; sporidiis subdistichis rectis, fusoideis, hyalinis, utrinque obtusis, triseptatis, ad septa constrictis, 30-38 \times 9-10, saepius 4-guttulatis.

Hab. in thallo vivente Lemaneæ, Ain Juræ. — Cum statu pycnidico saepè consociata.

35. **Metaspheeria** (subg. *Sagediopsis* Sacc.) *nephromiaria* (Linds.) Sacc. 4008 et Trott., *Microthelia nephromiaria* Linds. Lichenic. Microf. pag. 539, t. XXIV, fi. 1-2. — Peritheciis punctiformibus, semi-immersis, nigris, globulosis, laxe gregariis; ascis fusoideo-saccatis, crebro filiformi-paraphysatis, octosporis; sporidiis laxe 2-3-stichis, oblonge fusoideis, rectis, utrinque obtusulis, 3-septatis, non constrictis, hyalinis, circ. 18-20 \times 4-5.

Hab. in thallo et apothecis Nephromii cellulosi, Hermte Island et *Neuropogonis Taylorii*, Kerguelen Island.

EUDARLUCA Speg., Fungi Paulist., Rev. Mus. La Plata t. XV (1908)

p. 22 (Etym. *eu* bene et *Darluca*, h. e. status perfectus *Darluce*).

— Perithecia e globoso lenticularia, parenchymatica, glabra, ostiolata; asci cylindracei, paraphysati, octospori; sporidiis cylindraceo-fusoideis, hyalinis v. fumosis, 2-septatis. — Genus pulchellum in *Uredinibus* (an semper?) parasiticum, statum ascophorum *Darluca* proferens.

1. *Eudarluca australis* Spegazz. l. c. fig. E. — Peritheciis 3-5-gregariis erumpentibus, nigris, glabris, 80-100 μ . diam., impresso-ostiolatis coriacellis, contextu circa ostium atro, opaco, ambitu pellucido, minute denseque pseudoparenchymatico fuligineo (non cyaneo!); ascis antice obtusis rotundatis crassiusculeque tunicatis, postice breviter cuneatis in pedicellum brevissimum crassiusculum productis, paraphysibus filiformibus longioribus obvallatis, 60 \times 10, octosporis; sporidiis oblique distichis, 16-20 \times 4, ad septa lenissime constrictulis, loculo medio saepius leniter tumidiore, primo hyalinis serius fumosis, utrinque acutiuscule rotundatis, rectis v. lenissime inaequilateralibus.

Hab. in Uredine Cannæ Wint. ad folia Cannæ cujusdam in hortis Sao Paulo, Brasilia (USTERI).

MASSARINA Sacc. — Syll. II p. 153, IX p. 824, XI p. 332, XIV p. 586, XVI p. 535.

1. *Massarina plumigera* (Ell. et Ev.) Sacc. et Trott., *Massaria plu- 4010*
migera Ell. et Ev. North Amer. Pyren. (1892) p. 404. — Peritheciis sparsis, depresso-globosis, 0,75 mm. circ. latis, subepidermicis et ostio breviter conoideo v. cylindraceo subprominulis; ascis oblongo-clavatis, breviter stipitatis, 130-150 \times 22-25, octosporis, paraphysatis; sporidiis inordinatis, oblongo-cylindraceis, hyalinis, 3-septatis, 55-60 \times 12.

Hab. in foliis emortuis Viburni Lentaginis, Newfield N. Y. Amer. bor.

2. *Massarina polycarpa* (Füst.) Sacc. et Trav. - Syll. XX, pag. 32, 4011
Massaria polycarpa Füsting., in Bot. Zeitung (1868) p. 386, t. VII, f. 3-4. — Peritheciis globoso-lenticularibus, immersis peridermio pustulatim elevato tectis, 600-800 μ . lat., 400 μ . alt., non papillatis, sed ostio latiusculo erumpentibus; ascis clavatis, amplis, 150-200 \times 20, paraphysibus filiformibus copiosis obvallatis; sporidiis subdistichis fusoideis, 4-cellularibus, 30-36 \times 8-12, crassiuscule tunicatis, hyalinis, loculis subæqualibus.

Hab. in ramis corticatis Coryli Avellanæ pr. Münster, Germania.

3. *Massarina salicincola* Rehm, Ann. Mycol. IV (1906) p. 397. — 4012
Peritheciis arce congregatis, sub epidermide longe fuscata innatis eamque hemisphærice elevantibus, papillula minutissima demum prominente, globulosa, 0,3 mm. diam., glabra, excipulo submembranaceo, fusco, parenchymatico contextu; ascis cylindraceo-clava-

tis, apice rotundatis, crasse tunicatis, 90-120 \times 14-16, octosporis; sporidiis fusoideis, triseptatis, ad septa subconstrictis, quaque cellula 1-2 magni-guttata, hyalinis, strato mucoso lato obductis, 18-24 \times 5-7, distichis; paraphysibus filiformibus, septatis.

Hab. ad ramum emortuum *Salicis* sp., Dechbetten prope Ratisbonam Germania.

KOORDERSIELLA v. Höhn. *Fragm. Mykol.* VII (1909), *Sitzb. K. Ak. d. Wiss. Wien*, CXVIII, Abt. I, p. 833. - (*Etym. a Doct. S. A. Koorders, stirpium javanicarum scrutatori*). — *Perithecia omnino superficialia, mollia, carbonaceo-coriaceo-carnosa, ostiolo distincto prædicta; ascii clavati paraphysati; sporidia hyalina, multiseptata.*

1. **Koordersiella javanica** v. Höhn. l. c. p. 833. — *Peritheciis solitariis, sparsis, in hypothallo tenuissimo insidentibus, nigris, extus subcarbonaceis intus carnoso-coriaceis, globoso-depressis subdiscoideis, 170-240 μ . latis, 120 μ . altis, extus verruculoso-rugosis; ostiolo depresso, 16 μ . lato, zona levi pallidiore circumdato; parietibus peritheciis pluries stratosis, parenchymaticis, intus hyalinis extus nigrantibus, 15-45 μ . cr., ascis tenuiter tunicatis, sessilibus, fusideo-clavatis, supra obtusulis crassiusque tunicatis, 4-8-sporis, 42-45 \times 17; paraphysibus numerosis, crassis, ascis superantibus, mucosis; sporidiis distichis vel tristichis, tenuiter tunicatis, rectis v. vix curvulis, cylindraceo-fusoideis, utrinque rotundatis v. breviter acutato-apiculatis, hyalinis, 4-8-sporis, 24-28 \times 4-6.*

Hab. in foliis *Urostigmatis Vogelii*, Tjeukumeh prope Buitenzorg in ins. Java. — In hoc gen., observante cl. v. Höhnel, inscribendæ sunt verisimiliter etiam *Winterina lobata* (Tr. et Earl.) et *W. acanthostigmoides* Rehm.

ZIGNOËLLA Sacc. — *Syll. II* p. 214, *IX* p. 860, *XI* p. 339, *XIV* p. 587, *XVI* p. 536, *XVII* p. 709.

1. **Zignoëlla anonicola** Speg., *An. Mus. Nac. Buenos Aires* t. XIX (1909) p. 376. — *Peritheciis ligno denudato leniterque dealbato gregarie insidentibus, globulosis, 150-200 μ . diam., subprominulis ostiolo sublophostomaceo donatis; ascis cylindraceis vix pedicellatis, 75-90 \times 8-10, paraphysibus filiformibus vix longioribus obvallatis, octosporis; sporidiis ellipsoideo-biconoideis, didymis, triseptatis, eguttulatis, semper hyalinis, 15-20 \times 5-6.*

Hab. ad cicatrices ramorum *Anonæ Cherimoliæ* in hortis prope Tucuman, Argentina, Amer. austr.

2. **Zignoëlla Yerbæ** Speg., An. Mus. Nac. Buenos Aires t. XVII 4015 (1908) pag. 125. — Substrato sordide pallide irregulariterque fuco-nigrescente; peritheciis lenticulari-subconoideis 150 μ . diam., atris, glabris, levibus, opacis, basi insculptis, papillato-ostiolatis, carbonaceis; ascis fusoideo-clavatis modice attenuato-pedicellatis, 100-120 \times 14-15, octosporis, paraphysibus filiformibus longioribus cinctis; sporidiis subfusoideis oblique distichis, triseptatis, lenissime constrictis, hyalinis, saepius leniter inaequalateralibus, 24-25 \times 8.
Hab. in ligno decorticato cicatricum truncorum Ilicis paraguariensis secus rivulum Matto Queimado, Argentina, America austr.
3. **Zignoëlla lichenoidea** v. Höhn. Stzb. k. Ak. d. Wiss. Wien CXVIII 4016 Abt. I (1909) p. 331. — Peritheciis superficialibus, sed basi in stromate nigricante arcte adnato, tenuiter crustiformi insidentibus, seriatis v. solitariis, lateraliter unitis, sessilibus, globosis, coriaceo-carbonaceis, nigris, nitidulis, supra minute ostiolatis, 360-470 μ . lat. et altis, parietibus 50-60 μ . cr.; ascis numerosis, clavatis, stipitatis, supra rotundatis crasse tunicatis, 120 \times 13-14, octosporis, paraphysibus numerosissimis, ascos superantibus, ramosis, mucosis, crasse filiformibus; sporidiis hyalinis, subdistichis, crasse tunicatis, triseptatis, ellipsoideis, 22 \times 9, grosse quadriguttulatis.
Hab. in cortice ramorum Albizziæ moluccanæ, in horto botanico Buitenzorg in ins. Java. — *Z. omphalostomæ* Penz. et Sacc. et *Z. Caesalpiniae* Zimm. affinis.
4. **Zignoëlla arthopyrenioides** Rehm in Hedwigia XXVIII (1889) 4017 pag. 355. — Peritheciis atris, sparsis, in superficie ligni dealbata sessilibus, hemisphaericis, rotundatis v. subcompressis, haud papillatis, poro perspicuo pertusis, 200-300 μ . diam.; ascis ovoideis v. clavatis, crassis, 50-60 \times 24-30, octosporis; sporidiis fusoideis, obtusis, rectis, 2-(4-) locularibus, grosse guttulatis, medio valde constrictis, hyalinis, 15-20 \times 6-7, distichis; paraphysibus filiformibus, 1,5 μ . cr., hyalinis; J.—
Hab. ad radices emortuas, decorticatas Callunæ vulgaris juxta Stuibenfall ad Plansee Tirolia.
5. **Zignoëlla ovoidea** (Fr.) Sacc. — Syll. II p. 215 - var. **subcorticalis** 4018 Feltg., Vorst. Pilz. Fl. Luxemb. IV (1905) pag. 69. — Peritheciis subcorticalibus (demum erumpentibus?) dignoscitur.
Hab. sub cortice Betulæ, Baumb.-Siebendbr. in Luxemburgia. — A *Z. subcorticali* Cooke diversa. — Var. *runcalensis* Karst. Symb. mycol. XIII, p. 6, Berl. Ic. fung. I, p. 99, tab. 91, f. 2.

— Peritheciis gregariis, minutis $\frac{1}{5}$ - $\frac{1}{4}$ mm. diam.; ascis 45-55 \times 8-10; sporidiis 14-18 \times 4-5. — In ligno quercino sicco, Run-sala Fenniae. Potius *Zign. punctiformi* affinis.

6. *Zignoëlla sinapisperma* (Rebent.) Sacc. et Trav. - Syll. XX, 4019 p. 1172, *Sphaeria sinapisperma* Rabenb. in Hoffm. Icon. anal. fung. p. 98, t. 23, f. 1, 6. — Peritheciis nigris, punctiformibus, nunc dense nunc laxe gregariis, globulosis, superficialibus, apice obtusis; ascis clavatis, breve stipitatis filiformi-paraphysatis, octosporis; sporidiis fusiformibus, utrinque attenuatis, medio septatis, non constrictis, hyalinis, 25 \times 4.

Hab. ramis in dejectis emortuis Quercus pr. Gross-Gerau Germaniae, socia *Phaeodiscula pezizoide* (Rabenb.) Sacc. et Trav. — Ubi sporidia semper didyma maneant potius *Melanopsamma*.

7. *Zignoëlla anceps* Sacc. Ann. Mycol. VI (1908) p. 564. — Peritheciis laxe gregariis e basi adnata superficialibus, globoso-conoides, obtusis, carbonaceis, nigris, glabris, breve papillatis et papilla amissa anguste perforatis, 300 μ . diam.; ascis cylindraceis, breve noduloso-stipitatis, apice obtusulis, 115-135 \times 18, octosporis; sporidiis distichis, fusoideis, utrinque obtusulis, leniter curvis, 3-septatis, ad septum medium leviter constrictis, 4-guttulatis, hyalinis, 40 \times 10.

Hab. ad corticem radicis Ostryæ virginicæ, Lyndonville N. Y. (FAIRMAN). — Affinis *Z. sequanicæ* sed perithecia basi applanato-adnata, *Z. Sequojae* sed maculæ matricis nullæ. Ad subg. *Trematostoma* spectat.

8. *Zignoëlla?* *claypolensis* Speg., An. Mus. Nac. Buenos Aires t. XIX 4021 (1909) p. 377. — Peritheciis dense aggregatis per peridermium irregulariter fissum erumpentibus, carbonaceis, glabris, 150-180 μ . diam.; ascis clavulatis breviter pedicellatis paraphysatis, octosporis, 80-90 \times 12; sporidiis distichis fusoideo-biconoideis utrinque subacutiusculis, 20-25 \times 6, maturis 3-septatis, hyalinis (an postremo 5-septatis atque chlorinis?).

Hab. ad ramos aridos Casuarinæ strictæ, Claypole prope Buenos Aires, Argentina, America austr.

9. *Zignoëlla Abietis* v. Höhn., Stzb. k. Ak. d. Wiss. Wien, CXVIII, 4022 Abt. I (1909) p. 332. — Peritheciis superficialibus plus v. minus gregariis, saepe plagulas late effusas formantibus, hyphis brunneis 3-4 μ . cr. intermixtis; peritheciis globosis, breviter conoideo-ostiolato-papillatis, carbonaceis, levibus, nitidulis, fragilibus, 180 μ . circ. latis, glabris v. basi setulis parcis, brunneo-violaceis, septatis, le-

vibus, obtusis, $200 \approx 3-4,5$ tectis; paraphysibus numerosis, filiformibus, tenuiter tunicatis, 3μ . cr.; ascis clavatis, utrinque attenuatis, plerumque $80-90 \approx 10$, raro usque ad $120 \approx 8$, octosporis; sporidiis distichis, fusoideis, utrinque acutis, semper quadrilocularibus, hyalinis, quadriguttulatis, $26-32 \approx 3-4$.

Hab. in cortice putri Abietis in Wienerwalde Austriae inf.
— *Z. Britzelmayri*, *Z. crustacea*, *Z. macrosporae* affinis. Status conidicus adest: *Acrotheca Zignoëllæ* v. Höhn. n. f.

10. *Zignoëlla palmicola* P. Henn., Engl. Jahrb. XXXVIII (1905) 4028 p. 126. — Peritheciis innato-superficialibus, gregarie sparsis, hemisphaerico-conicis, obtuso-papillatis, cinereo-fuscis, c. $300-350 \mu$. diam.; ascis fusoideo-clavatis, apice tunicatis, subobtusis, octosporis, $90-110 \approx 7-10$, paraphysibus mycelioideis, hyalinis; sporidiis oblique monostichis v. subdistichis, oblonge fusoideis, rectis vel curvulis, utrinque acutis, medio 1-septatis dein 3-septatis, hyalino-cyanescentibus, $30-40 \approx 4-5$.

Hab. in foliis Palmarum, Kamerun Africæ centr. (ZENKER).

11. *Zignoëlla texticola* Vouaux in Bouly de Lesdain, Bull. Soc. bot. France LVI (1909) p. 5. — Peritheciis gregariis, semiimmersis, nigris, $0,2-0,5$ mm. diam., poro simplici; ascis cylindraceo-clavatis, breviter stipitatis, $80 \approx 10-11$, octosporis, paraphysatis; sporidiis elongatis, hyalinis, 4-guttatis, constricto-1-septatis, utrimque obtusiusculis, initio muco crasso hyalino obvolutis, deinde nudis, $24-28 \approx 6-7$.

Hab. in tela cera illita, Versailles et tela bitumine illita in prato dejecta pr. Dunkerque Galliae.

12. *Zignoëlla longispora* Rehm, Oesterr. Bot. Ztschr. LVI (1906) 4025 p. 294. — (Nomen nudum).

Hab. in ramulis siccis Rhododendri ferruginei, Alpen-ner. - Alpe Stubai Austria.

MELOMASTIA Nits. et Fuck. — Syll. II p. 213, XVII p. 707.

1. *Melomastia shastensis* Earle, Bull. of the New York Bot. Gard. 4026 (1904) p. 292. — Peritheciis sparsis vel gregariis, ligno infossis plus minus compressis, nigris, collabescentibus, $0,3-0,5$ mm. cr., ostiolo depresso-perforato; ascis cylindraceis, $70-80 \approx 10-12$; paraphysibus filiformibus; sporidiis subdistichis, irregulariter oblongis v. anguste ovoideis, hyalinis, 3-4-septatis, non constrictis, loculo medio sœpe leniter inflato, circ. $25 \approx 5-6$.

Hab. in ligno decorticato *Abietis shastensis*, Mt. Shasta Calif. Amer. bor. (COPELAND).

2. **Melomastia lignicola** Kirschst. in Jaap, Abh. bot. Ver. Prov. Brandenb. LII (1910) p. 139. — (Nomen nudum).

Hab. in ramis siccis *Betulæ albæ* prope Triglitz in Germania.

ORANIETTA Speg., An. Mus. Nac. Buenos Aires, t. XIX (1909) p. 378 (Etym. e loco *Oran*). — Perithecia sparsa cortice v. ligno omnino immersa, ostiolo papillato vix emergentia, majuscula; asci cylindracei, octospori, paraphysati; sporidia monosticha cylindracea 3-septata hyalina. — Genus *Melomastiae* peraffine videtur.

1. **Oraniella coffeicola** Speg. l. c. p. 378, cum. icon. — Peritheciis 4028 globulosis 0,5-1,25 mm. diam.; ascis 180-250 × 7-10; sporidiis cylindraceis, rectis v. vix inaequilateralibus v. subcurvulis, 24-30 × 6-8, 3-septatis, ad septa omnia constrictulis, loculis grosse 1-guttatis, semper hyalinis.

Hab. ad ramos vetustiores *Coffea arabicae* prope Orán, Jujuy, Argentina, Amer. austr. — Jodi ope obturaculus minutissimus ascorum leniter caerulescit.

WINTERINA Sacc. em. — Syll. IX p. 909, XIV p. 589, XVI p. 538, XVII p. 708.

1. **Winterina peltigerophila** Rehm, Ann. Mycol. VI (1908) pag. 323. 4029 — Peritheciis in pagina superiore Peltigeræ dilutissime cinerescente vel nigrescente dispersis, sessilibus, atris, globulosis, poro minutissimo pertusis, contextu parenchymatico fusco, 100-150 μ. diam., glabris; ascis clavatis, apice rotundatis, 80 × 15, octosporis; sporidiis fusoideis, utrinque subacutatis, transverse 5-septatis, hyalinis, 20 × 5 distichis; paraphysisibus, tenerrimis, septatis, ca. 2 μ. crassis.

Hab. in superficie Peltigeræ in Germania. — Ex herb. Fuckel in herb. Barbey-Boissier (sub *Abrothallo*). — Jodi ope hymenium vinose rubens. — A *Leptosphaeria rivana* et *Metasphearia leptogiophila* probe distinguenda.

ACANTHOSTIGMA De Not. — Syll. II p. 207, IX p. 854, XI p. 337, XIV p. 590, XVI p. 539, XVII p. 712.

1. **Acanthostigma Gnaphaliorum** Speg., An. Mus. Nac. Buenos Aires 4030 t. XIX (1909) p. 375. — Maculis nullis; peritheciis hinc inde la-

xissime gregariis, superficialibus, ex hemisphærico subconoideis 70-125 μ . diam., nigris, setulis radiantibus v. erectis, unicellularibus fumosis 100-200 \times 4-5 subdensiuscule armatis; ascis cylindraceis brevissimeque pedicellatis, octosporis, a paraphysatis, 50-55 \times 8-10; sporidiis oblique distichis, rectis v. lenissime subinequilateralibus utrinque acutiusculis 18-20 \times 3-4, 3-septatis, ad septa leniter constrictis, primo hyalinis serius obsolete fumosis.

Hab. ad folia viva *Gnaphalii* purpurei in pratis Ensenada prope La Plata, Argentina, Amer. austr.

2. **Acanthostigma rubescens** Rehm, Ann. Mycol. VII (1909) p. 536. 4081

— Peritheciis in maculis hypophyllis late rosaceis dispersis, inter pilos nidulantibus, folii conideo-globosis, imprimis versus apicem setis fuscis acutis, rectis, c. 30-40 μ . long. 3-4 μ . cr. obsessis, parenchymatice e cellulis permagnis fuscis contextis, 100 \times 90; ascis clavatis, ad apicem rotundatis, sessilibus, 45-48 \times 8-9, octosporis sporidiis fusiformibus, 3-5-septatis, hyalinis, 12-15 \times 3, distichis; paraphysibus filiformibus.

Hab. in foliis *Solanum hypoleuci*, Sao Leopoldo Rio Grande do Sul Brasiliæ (THEISSEN).

3. **Acanthostigma Lantanæ** Theiss., Beih. Bot. Centralbl. Bd. XXVII 4082 (1910) Abt. II, pag. 397. — Maculis nullis; peritheciis in hypophyllo numerosissimis dispersis, in epiphylllo rarioribus, globosis v. obovatis, inter pilos folii nidulantibus, grosse parenchymatice contextis, 200-240 μ . diam., papilla obtusa, hyphis longis, fuscis, flexuosis, septatis, 5-6 μ . crassis, hinc inde conidiferis obsitis; ascis clavatis, modice pedicellatis, p. sp. 85-120 \times 20-26, crasse tunicatis; sporidiis oblongis, maturis intense viridibus, 3-septatis, utrinque (imprimis apice infero) angustatis, ad septum medium constrictis, minus ad reliqua septa, uniguttulatis, polystichis, 32-45 \times 8-9.

Hab. in foliis vivis Lantanæ, Sao Leopoldo Rio Grande do Sul Brasiliæ (H. DIECKMANN).

4. **Acanthostigma subnivale** Rehm, Ann. Mycol. V (1907) p. 539. — 4083

Peritheciis gregariis sessilibus, globulosis, ad basim hyphis fuscidulis insidentibus, vertice setis plurimis, rectis, acutis, fuscis, 50 \times 5, vestitis, contextu parenchymatico, c. 300 μ . diam.; ascis clavatis, apice rotundatis, 70 \times 10-12, octosporis; sporidiis oblongo-clavatis, utrinque rotundatis, transverse 3-septatis, medio subconstrictis, hyalinis, 15 \times 5, distichis; paraphysibus ramosis.

Hab. in hypophyllo folii Graminis inter Rhododendra

ferruginea in alpibus supremis vallis Zillertal Tirolæ (Dr. REHM). — Affine *A. Alni* et *A. parasitico*.

5. *Acanthostigma Bambusæ* v. Höhn., Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) p. 334. — Peritheciis superficialibus, plerumque singulis v. 2-5 gregariis, in maculis effusis nigricantibus, subvelutinis insidentibus, nigris, carbonaceis, nitidulis, globosis, supra rotundatis v. depresso ostiolato-papillatis, 210-280 μ . diam., ostiolo rotundato 20 μ . lato. supra levibus, basi setulis sparsis, nigris, septatis, obtusulis, apice pallidioribus 200-250 \approx 6-7 tectis; paraphysibus numerosissimis, filiformibus, 4 μ . cr.; ascis octosporis, 100-130 \approx 15-20, sessilibus v. brevissime noduloseque pedicellatis, tenuiter tunicatis, clavato-fusoideis, supra conoideo-angustatis obtusulis, J.-; sporidiis distichis v. tristichis, hyalinis, plerumque 12-locularibus, 51-54 \approx 7, fusoideis, apice obtusulis.

Hab. in vaginis putrescentibus *Bambusæ* sp. in Hort. bot. Buitenzorg in ins. Java. — Status conidicus adest: *Acrothecium Bambusæ* v. Höhn.

6. *Acanthostigma genuflexum* (v. Höhn.) Sacc. et Trott., *Acanthostigmella genuflexa* v. Höhn., Ann. Myc. III (1905) pag. 328. — Peritheciis superficialibus, sparsis, globosis v. globoso-ovoideis, tenui-membranaceis, nigro-brunneis, apice carbonaceis, 70-80 μ . lat., 100 μ . alt.; ostiolo setuloso, setulis 2-10 robustis, brunneo-nigris, acutis, septatis, 60-80 \approx 4-5, raro levi v. subpiloso; ascis supra angustatis, clavatis, 30-35 \approx 8, octosporis; sporidiis pluriseriatis, chlorinatis, in massa pallide olivaceis, elongatis v. fusoideis, utrinque obtusule tenuatis, 2-septatis, loculo medio plerumque latiore, 8-14 \approx 2-3,5.

Hab. in culmis putrescentibus *Phragmites communis* prope Tulln Austriae inf. — Socium adest *Helicosporium Phragmitis* v. Höhn. forsitan metageneticum connatum. — *Acanthostigmella* v. Höhn. a typo videtur vix recedere ostiolo particulatim setuloso.

7. *Acanthostigma orthosetum* (v. Höhn.) Sacc. et Trott., *Acanthostigmella orthoseta* v. Höhn., Fragm. z. Mykol. VIII (1909) in Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 1201. — Peritheciis nigris, arcte gregariis, plerumque seriatis, superficialibus, 100-160 μ . latis, 100-120 μ . altis, infra globosis, tenuiter membranaceis, parenchymaticis, hyphis brunneis, septatis, 2-3 μ . latis tortuosis tectis, supra conoideis in discum 80 μ . latum subrotundum opacum desinentibus; ostiolo in centro disci subrotundo 15 μ . diam. præ-

ditis, setulosis, setulis circulariter pluriseriatis, 60-100 \times 5-5,5, interdum brevioribus; ascis aparaphysatis copiosis tenui-tunicatis sessilibus, fusoideo-clavatis, octosporis 40-52 \times 8; sporidiis 2-3-seriatis ex hyalino pallide olivaceis, fusoideis, utrinque acutis, quadri-cellularibus 4-5 guttulatis, non constrictis, 15-20 \times 3-4, articulo uno v. binis intermediis paullo crassioribus.

Hab. in caulinis siccis Heraclei sp. ut videtur, Sonntagsberg Austria inf. (STRASSER).

8. *Acanthostigma glaciale* Rehm, Oest. Bot. Zeitschr. LVI (1906) 4087 p. 294. — (Nomen nudum).

Hab. in foliis Graminacearum, Zillertal sub Pfitscherjoch Tirolia. — An idem ac *Ac. subnivale* n. 4?

LASIOSPHÆRIA Ces. et De Not. — Syll. II p. 505, IX p. 969, XIV p. 638, XVII p. 576, XVII p. 790.

1. *Lasiosphæria subambigua* v. Höhnel, Ergebni. Bot. Exp. Südbras. 4088 1901, Denk. k. Ak, d. Wiss. Wien, Bd. LXXXIII (1907), Extr. pag. 23. — Peritheciis superficialibus, gregariis, membranaceo-carbonaceis, supra subconoideis glabris, ceterum setulis acutis, nigris, opacis, 120 \times 7-12, nonnullis brunneis translucidis, septatis, usque ad 160 \times 6 immixtis crebre tectis, 350-400 μ . lat. 500-600 μ . altis, basi hyphis brunneis septatis 4-6 μ . cr. præditis; paraphysibus numerosis, filiformibus, mucosis; ascis clavatis, longe pedicellatis, 140-180 \times 8, octosporis, supra obtusis et guttula pallida præditis; sporidiis distichis, in asco hyalinis, contortis, unilocularibus, extus maturantibus 2-4-locularibus, supra ellipsoideis brunneis, infra subhyalinis et vermiformi-incurvatis, utrinque breviter hyalino-appendiculatis, 40-44 \times 4-5.

Hab. in stipite putri Palmarum, Alto da Serra prope Santos, Sao Paulo, Brasilia. *Las. ambigua* Sacc. affinis.

2. *Lasiosphæria Rickii* Theiss., Beih. Bot. Centralbl. Bd. XXVII 4089 (1910) Abt. II, pag. 398. — Peritheciis gregariis, plerumque arcte aggregatis crustamque fere continuam efformantibus, sessilibus, globosis, 700-800 μ . diam., atris, asperis, verrucis crassiusculis conicis setosis obsitis, carbonaceis; setis sparsis ex hyphis fasciculatis, fuscis, 4-5 μ . cr., septatis compositis; ipsa perithecii cavitate c. 400-500 μ . diam.; ascis longe cylindraceis, rarius sublavatis, apice angustatis et truncatis, lumine nodulose incrassato, inferius abrupte in pedicellum tenuissimum longiusculum productis, p. sp. 115-160 » 10-13 (rarius ventricosis c. 100 \times 18); para-

physibus flexuosis filiformibus tenerrimis, 0,5-1 mm. cr., ascos superantibus, laxis; sporidiis oblique distichis v. polystichis, hyalino-flavidis, plerumque curvulis, oblongo-fusoideis, demum 3-septatis, non constrictis, 40-52 \approx 4-5, supra rotundatis, infra breviter (3-5 μ) acuteque hyalino-rostratis.

Hab. ad ramos emortuos, São Leopoldo Rio Grande do Sul Brasiliae (J. RICK).

3. *Lasiosphæria?* *epimyces* Spegazz., An. Mus. Nac. Buenos Aires 4040 t. XIX (1909) pag. 403. — Peritheciis superficialibus densissime gregariis globulosis, 200-300 μ . diam., papilloso-squarrulosis, nigrae; ascis fusoideis apice subtruncatis deorsum breviter attenuato-pedicellatis, 120-130 \approx 15-18, octosporis, pseudoparaphysatis; sporidiis cylindraceis 3-septatis, primo hyalinis dein fuligineis, 50-55 \approx 5-6.

Hab. ad hymenium nec non pileum Polypori radicati? in silva Bobadal Jujuy, Argentina, Amer. austr. — Species habitu sporarumque juvenilium fabrica eximie cum *Lasiosphæria* conveniens sed sporidiis postremo deminutis fuligineisque recedens et novi generis typum (*Aulospora epimyces* Speg.) certe sistens.

4. *Lasiosphæria polyporicola* P. Henn., Hedw. XLV (1905) p. 28. — 4041 Peritheciis superficialibus, aggregatis vel sparsis, membranaceo-coriaceis, atro-fuscis, globulosis v. ovoideis, ruguloso-tuberculatis c. 250-300 μ . diam., pilis sparsis atro-brunneis, septatis, flexuosis, c. 3,5-4 μ . cr. vestitis; ostiolis obsoletis; ascis fusoideo-cylindraceis, breve stipitatis, apice rotundato-applanatis, 8-sporis, 150-170 \approx 12-18; paraphysibus copiosis mycelioideis, flexuosis, hyalinis, c. 1 μ . cr.; sporidiis subdistichis v. subtristichis, cylindraceo-vermicularibus, utrinque rotundatis, interdum rostratis, hyalinis, pluriguttatis, 3-septatis, 50-60 \approx 4-6.

Hab. in Polyporo adusto prope Michailowskoe Rossiæ.

5. *Lasiosphæria hirsuta* (Fr.) Ces. et De Not. — Syll. II, p. 191 — 4042 f. *parasitans* Rehm, Ascom. exsicc. fasc. 43 n. 1807 et Annales Mycol. VII (1909) pag. 136. — A typo differt peritheciis plus minus globosis, nec conoideis, pilis plerumque rectis, brunneis, nec acutis, usque ad 300 \approx 5-6 tectis; sporidiis flavidis, denique brunneis, 8-locularibus, 50 \approx 5-6.

Hab. in Polyporo in trunco Pini, Weimar Ettersberg (DIEDICKE).

6. *Lasiosphæria ambigua* Sacc. — Syll. II p. 197 — var. *carbonaria* 4043 Rick, Broteria IV (1905) p. 161. — Sporidiis junioribus ea *Bom-*

bardiae fasciculatæ, maturis vero ea *Sordariæ coprophilæ* imitantibus.

Hab. in areis carbonariis, Torres Verdas Lusitaniae. — An potius *Sordariæ* sp.?

7. **Lasiosphæria aristata** (Quél.) Sacc. et Trav. — Syll. XIX p. 1053, 4044
Lasiella aristata Quél Champ. Vosges, III (1875) p. 518, t. IV, f. 27. — Peritheciis conico-hemisphæricis, minutis, nigris, pilis rigidulis, divaricatis, nigris laxiusculis conspersis, ostiolo punctiforme; sporidiis cylindraceis, obtusis, triguttulatis, 8 µ. long.

Hab. in culmis exsiccatis graminum in Gallia. — Adsunt pycnidia: sporulis oblongo-fusoideis, guttulatis, utrinque aristatis. Species ex diagnosi et icone omnino dubia.

8. **Lasiosphæria culmorum** Miyake et Hara, Bot. Mag. Tokyo (1910) 4045 p. (337) [japonice].

Hab. in culmis Bambusæ sp. in Japonia.

9. **Lasiosphæria ovina** (Pers.) Ces. et De Not. — Syll. II, p. 199 — 4046 Huc, recte observante v. Höhn. Fragm. Myk. VIII (1909) p. 32 spectat *Heteronectria spirillospora* Penz. et Sacc. - Syll. XIV pag. 624. — Specimina vetusta, subdenudata, sœpe collabescentia hinc molliuscula visa, fucum fecerunt.

HERPOTRICHIA Fuck. — Syll. II p. 211, IX p. 856, XI p. 338, XIV p. 592, XVI p. 541, XVII p. 714.

1. **Herpotrichia alpincola** Rehm, Ann. Mycol. IV (1906) p. 338. — 4047 Peritheciis in maculis nigris, c. 2-3 cm. long., 0,5 cm. lat., gregariis sub epidermide nidulantibus eamque elevantibus, denique perrumpentibus et plerumque in cortice denigrato sessilibus, globosis, minute papillulatis, atris, basi hyphis permultis, sœpe perlongis, simplicibus, septatis, subfuscis, 4 µ. lat. conjunctis, 0,3 mm. diam.; ascis cylindraceo-clavatis, apice rotundatis, octosporis, 90-120 × 10-20; sporidiis fusiformibus, utrinque subobtusis, transverse 1-3(-5) septatis, hyalinis, senescentibus interdum fuscidulis, 25-30 × 5-8, strato tenui mucoso obductis, distichis; paraphysibus ramosis.

Hab. ad caules putrescentes Aconiti in alpibus editioribus Hungariæ et Transilvaniæ (LINHART, LOIKA). — A *Metaspæria rupicola*, i.eque aconiticola, probe distincta.

2. **Herpotrichia Boldoæ** Spieg., Fungi Chilenses (1910) p. 65. — Pe- 4048 ritheciis ligno denudato insidentibus, subgregariis, subiculo olivaceo laxe gossypino absconditis, globosis vel cupulato-collapsis, mi-

nutis, ostiolo concolore vix papillato donatis, atris, coriacellis, 200-250 μ . diam.; ascis subcylindraceis, postice cuneatis brevissimeque pedicellatis, dense paraphysatis, 100 \times 14-16; sporidiis fusoideis, rectis v. vix inæquilateralibus, submajusculis, hyalinis, medio 1-septato-constrictulis, primo 6-blastis (an muco tenuiter vestitis?) dein 3-5-septatis, 37-40 \times 7-8.

Hab. in ramis emortuis putrescentibus *Boldoæ fragrantis* prope Talcahuano Chile, Amer. austr.

3. *Herpotrichia chilensis* Speg. *Fungi Chilenses* (1910) pag. 66, cum 4049 icon. — Peritheciis ligno denudato sparsis vel laxe gregariis, udis subglobosis siccis cupulato-collapseis, 200-250 μ . diam., nigris, vix papillulato-ostiolatis, membranaceo-coriacellis, basi hyphis radian-tibus nonnullis olivaceis cinctis, 50-250 \times 5-6; ascis ellipsoideo-sub-clavulatis, breviter pedicellatis, dense paraphysatis, 80-100 \times 20, 4-6-8-sporis; sporidiis octonis substristichis, fusoideis inæquilate-ralibus hyalinis, 8-blastis, serius 3-5-septatis, 38-45 \times 7-9.

Hab. in ramis vetustis *Proustiae pungentis* prope Batuco, Chile Amer. austr.

4. *Herpotrichia Myriangii* Raciborski, *Bull. Ac. Sc. Cracovie* (1909) 4050 p. 384. — Peritheciis nigris, globosis, coriaceis, 190-240 μ . diam., apice depresso ostiolato-papillatis, papilla pallida 30-40 μ . alta, 40-60 μ . lata, superficie pilis crebris, curvulis, brunneis 30-90 \times 4-6 tectis; loculo peritheci globoso, 120-160 μ . diam., ascis e basi et e lateribus ad ostiolum convergentibus farcto; ascis clavatis, octosporis 55-64 \times 17-20; sporidiis rectis v. curvulis, brunneis, elongato-ovoideis, apice rotundatis, levibus, 14 \times 5, non constrictis, di-stichis; paraphysibus filiformibus.

Hab. in stromatibus *Myriangii* ad folia *Caricæ Papayæ* prope Buitenzorg Java.

5. *Herpotrichia tenuispora* Kirschst., *Verh. Botan. Ver. Brandenb.* 4051 XLVIII (1906) pag. 50. — Peritheciis gregariis, sessilibus, membranaceis, pilis longis, brunneis, incurvatis, septatis, 4 μ . cr. ob-sitis, circ. 0,5 mm. diam., impresso-subglobosis, nigris; ascis anguste cylindraceo-clavatis, supra rotundatis, breviter pedicellatis, octosporis, 100-110 \times 6-7; sporidiis bi-v. polystichis, hyalinis, elongato-fusoideis, guttulatis, indistincte 6-locularibus, ad septa plus minus constrictis, loculo secundo v. tertio conspicue protuberanti, in ascis ipsis sæpe germinentibus, 26-35 \times 3; paraphysibus numero-sis, hyalinis, filiformibus, ramosis.

Hab. in caulis putrescentibus Urticæ dioicæ, Hasellake prope Gross-Behnitz Germaniæ.

6. **Herpotrichia rhodospiloides** Peck, Bull. Torr. Bot. Club XXXVI 4052 (1909) pag. 154. — Peritheciis gregariis, globosis, tomento effuso atro insidentibus, ad apicem subglabris, rufo-brunneis vel griseis, aliquando omnino atris, ostiolis obscure laceratis; ascis clavatis v. subcylindraceis, 60-100 μ . longis, 10-12 μ . latis; sporidiis confertis v. subdistichis, oblongis, subfusoides, rectis v. subcurvatis, unisep-tatis, hyalinis, maturis flavescentibus, 16-20 \approx 6-8; quaque cellula 1-2-septata.

Hab. in ligno decorticato Populi deltoidis, Batesville Arkansas Amer. bor. (EL. BARTHOLOMEW). — *Herp. rhodospilæ* (B. et C.) Sacc. proxima sed colore peritheciorum et sporidiis uni-septatis diversa.

7. **Herpotrichia appendiculata** Kirschst, ap. Jaap in Verh. bot. Ver. 4053 Prov. Brandenb. LII (1910) p. 138. — (Nomen nudum).

Hab. in ramulis putrescentibus Frangulæ Alni prope Triglitz in Germania.

Sect. 7. Phæophragmiæ.

- **PHÆOSPHÆRIA** I. Miyake, Pilze Reispfl. Japan (Journ. Coll. Agric. Tokyo, II, p. 246) (Etym. *phaios*, ater et *Sphæria*, ob sporidia et perithecia atra). — Perithecia subcutano-erumpentia, typice foliicolæ, sphærellacea. Asci octospori aparaphysati. Sporidia 2-pluri-septata, oblonga, brunnea. — Genus cum plerisque speciebus mei gen. *Leptosphærella* (Syll. II, p. 47, XIV, p. 19, n. 7) congruit; tamen cum nonnullæ hujus generis paraphysatæ videantur, genus Miyakeanum pro speciebus *aparaphysatis* adhiberi potest, dum *Leptosphærella* Sacc. e. p. pro illis *paraphysatis* servanda est, quæ tunc a typo *Leptosphærie* peritheciis membranaceis, minutis, foliicolis et sœpe maculicolis dignoscitur.

1. **Phæosphæria Oryzæ** I. Miyake, Pilze Reispfl. Japan. (Journ. Coll. Agricult. Tokyo, II (1910) p. 246, t. XIII, f. 15-17. — Peritheciis subcutaneis, poro vix papillato erumpentibus, subglobosis, bruneo-nigris, 70-125 μ . lat., 90-125 μ . alt.; ascis cylindraceis, deorsum tenuatis, 35-55 \approx 7-9, apice rotundatis, 8-sporis; sporidiis distichis, fusoides, sœpe curvulis, 4-cellularibus, ad septa leniter constrictis, sœpe minute pluriguttulatis, 16-23 \approx 4-5, flavo-atris.

Hab. in foliis glumisque *Oryzæ sativæ*, cui valde noxia, in tota Japonia. — Morbus japonice audit *Shiro-hagare-byo* (morbus albus).

2. **Phæosphaeria Bambusæ** Miyake et Hara in Bot. Mag. Tokyo (1910) 4055 p. (340) [japonice].

Hab. in *Bambusæ* sp. in Japonia.

LEPTOSPHÆRIA Ces. et De Not. — Syll. II p. 13, IX p. 762, XI p. 321, XIV p. 562, XVI p. 510, XVII p. 719. — *Leptosphaarella* (Sacc.) Spieg. in posterum certe separanda, sed totius generis *Leptosphaeria* epicrisis præmittenda.

1. **Leptosphaeria Anemones** Hollós, Ann. Mus. Nat. Hung. IV (1906) 4056 p. p. 334, t. VIII, fig. 6. — Peritheciis sparsis, epidermide tectis, dein erumpenti-superficialibus, depresso-globosis, glabris, nitidis, nigris, ostiolo brevi cylindrico, 210-250 μ . diam.; ascis cylindraceo-clavatis, breve stipitatis, octosporis, 74-90 \times 8-10, filiformi-paraphysatis; sporidiis distichis v. interdum oblique monostichis, elongato-fusoideis, rectis v. leviter curvulis, 6-septatis, flavidulis, 30-34 \times 3,5-4, loculo tertio superiore plerumque paullo crassiore.

Hab. in petiolis siccis *Anemones silvestris* prope Kecskemét Hungariæ. — A *Leptos. raphidophora* Hazsl. differt sporidiis majoribus 6-septatis nec 9-septatis.

2. **Leptosphaeria thalictricola** Hollós, Ann. Mus. Nat. Hungar. VII (1909) p. 51. — Peritheciis sparsis, epidermide velatis, depresso-globosis, breve papillatis, atris, glabris, 250-280 μ . diam., contextu celluloso; ascis clavatis, breve stipitatis, octosporis, 90-100 \times 8-11, filiformi paraphysatis; sporidiis 2-3-stichis, fusiformibus, curvulis, 7-septatis, 8-guttulatis, loculo tertio superiore inflato, 26-34 \times 3,5-4.

Hab. in caulinis siccis *Thalictri collini* prope Kecskemét Hungariæ.

3. **Leptosphaeria Thoræ** Jaap, Ann. Mycol. VI (1908) p. 210. — Peritheciis in maculis pallidis insidentibus, sparsis, nigro-brunneis, globosis, 200-250 μ . cr., late ostiolatis; ascis clavatis, supra rotundatis, stipite brevi, usque ad 10 μ . longo præditis, rectis v. curvis, 70 \times 14-16, dein usque ad 100 μ . elongatis, octosporis; sporidiis distichis, elongato-fusoideis v. subclavatis, rotundatis, 4-locularibus, ad septa constrictulis, loculo secundo supero parum latiore, 18-24 \times 7-7,5, viridi-flavis; paraphysibus parcis, filiformibus, supra inflatis, hyalinis.

Hab. in foliis Ranunculi Thoræ, prope Eisenkappel in Karawanken Austriae. — Socia adest *Phyllostictæ* species.

4. **Leptosphaeria andrijevicensis** Bubák, Bull. Herb. Boiss. 2 sér. VI 4059 (1906) p. 400. — Peritheciis sparsis v. hinc inde aggregatis, depresso-convexis, 250-400 μ . diam., nigris, primum epidermide tectis, dein collo conoideo erumpentibus, contextu obscure brunneo parenchymatico; ascis elongato-clavatis, rectis v. curvulis, 80-100 \times 9-11, basi sensim angustatis, breviter pedicellatis, octosporis, paraphysibus filiformibus numerosis, hyalinis obsitis; sporidiis fusoideis, supra distichis infra oblique monostichis, 22-26 \times 4-4,5, rectis v. curvulis, utrinque rotundatis, 7-septatis, loculo tertio superiore majori, brunneo-olivaceis.

Hab. in caulinis senioribus Ranunculi Villarsii pr. Andrijevicon sub Hasanac planina 1000-1400 m. alt., Montenegro.

5. **Leptosphaeria inconspicua** Rehm, Oesterr. bot. Ztschr. LVI (1906) 4060 p. 296 (Nomen nudum).

Hab. in ramulis Berberidis prope Bärenbad Stubai Austria.

6. **Leptosphaeria Pelargonii** Rehm, Hedwigia XLVII (1905) pag. 5, 4061 fig. 2 (ex errore *Pelagerinii*). — Peritheciis in maculis dealbatis exsiccatisque irregularibus, tenuissime fuscidule cinctis, sparsis, innotatis, globulosis, nigris, ostiolo haud conspicuo, c. 100 μ . diam., membranaceis; ascis clavatis, apice rotundatis, 60-65 \times 8-9, octosporis; sporidiis cylindraceis, utrinque rotundatis, transverse 3-rarissime 4-septatis, haud constrictis, cellulis oleoso-guttatis, subfuscis, 12-14 \times 3, in superiore asci parte distichis; paraphysibus ramosis, 2 μ . cr.

Hab. ad folia Pelargonii culti, Rio de Janeiro Amer. austr. (ULE). — *Lept. Tini* Ell. et Ev. et *L. Physalidis* Ell. et Ev. affinis, sed sporidiis rectis, obscurioribus, cylindricis diversa.

7. **Leptosphaeria Lankeana** P. Henn., Verh. Bot. Ver. Prov. Brandb. XLVII (1905) p. 220. — Peritheciis sparsis v. gregariis, epidermide tectis dein erumpentibus, ostiolatis, ovoideis, atris, 180-200 μ . cr.; ascis clavatis 8-sporis, 90-120 \times 10-12, paraphysibus filiformibus septatis valde constrictis, hyalinis, 3-6 μ . cr.; sporidiis subdistichis interdum subtristichis, fusoideis, utrinque acutiusculis, 7-9-septatis, ad basim constrictis, primo hyalinis dein olivaceis, 25-40 \times 4-5,5.

Hab. in caulinis siccis Hyperici perforati, Höllmühle Germaniae. — Socia adest *Diploceras hypericinum* (Ces.). A *Lept. Hyperici* Wint. etc. omnino diversa.

8. **Leptosphaeria inquinans** Peck, New Y. St. Mus. Bull. 131 (1909) 4063

p. 22. — Peritheciis dense gregariis, subcarbonaceis, epidermide ostiolis nigris perforata tectis, globosis, $\frac{3}{4}$ mm. lat., nigris; ascis cylindraceo-clavulatis; sporidiis distichis v. confertis, cylindraceis, obtusis, plerumque curvis, 3-septatis, coloratis, loculis extimis subhyalinis, 16-24 \times 4-6.

Hab. in cortice Aceris saccharini, Vaughns Washington Co. Amer. bor. (S. H. BURNHAM).

9. **Leptosphaeria Auerswaldii** Sacc. et Trav. — Syll. XIX, p. 1096 — 4064

Spharella leptosphaeroides Auersw. in Gonn. et Rabenh. Mycol. Europ. Heft. 5-6, p. 13, t. 7, f. 104. — Peritheciis amphigenis, atris, epidermide innatis, sparsis, exacte globosis, ostiolo cylindraceo brevissimo sed crasso, 20 μ . longo præditis, 120-140 μ . diam.; ascis oblongo-fusoideis, vix stipitatis, apice rotundatis, 55-66 \times 14, octosporis; sporidiis dense 3-4 stichis, oblongo-fusoideis, 3-septatis, ad septum medium constrictis, melleis, 30 \times 6, loculis singulis 1-2-guttulatis.

Hab. in utraque pagina et sepalis Arenariae ciliatæ in Alpibus. — Paraphyses deesse dicitur, sed species ad gregem *Leptosphaerellæ* certe pertinet.

10. **Leptosphaeria Gypsophilæ** Hollós, Ann. Mus. Nat. Hung. V (1907) 4065

p. 45. — Peritheciis primum epidermide tectis, demum superficialibus, dense gregariis, depresso-globosis, breve papillatis, nigris, subcuticularibus, 300-400 μ . diam.; ascis cylindraceo-clavatis, breve stipitatis, 70-80 \times 8-10, filiformi-paraphysatis; sporidiis distichis, fusoideis, rectis subfalcatis, utrinque leniter attenuatis, 3-septatis, ad septum medium constrictis, pluriguttulatis; flavidulis, 40-50 \times 3-4.

Hab. in caulis siccis Gypsophilæ paniculatæ, prope Kecskemét Hungariæ.

11. **Leptosphaeria ?Prolifera** Feltg., Vorst. Pilz-Fl. Luxemb. IV (1905) 4066

p. 50. — Peritheciis gregariis in maculis pallidis indefinitis insidentibus, epidermide immutata omnino tectis, brunneis, globosis v. subdepressis, 0,1-0,15 mm. raro 0,3 mm. diam.; ascis clavatis, supra angustatis, breviter crasseque pedicellatis; paraphysibus filiformibus septatis obsitis, octosporis, 85-95 \times 16-18; sporidiis inordinate distichis, ellipsoideo-fusoideis, utrinque obtusis, rectis vel curvulis, triseptatis, ad septa constrictulis, flavidis, guttulis numerosis parvis raro nonnullis majoribus immixtis præditis, 22-28 \times 8-8,5.

Hab. in caulis siccis Tunicæ proliferæ, Pulverm. Höhe et Garten Conrot Luxemburgia. — *L. Euphorbiæ affinis.*

12. *Leptosphaeria eustoma* (Fr.) Sacc. — Syll. II, p. 61 — var. *le-* 4067
guminosa Fairman, Ann. Mycol. IV (1906) p. 327, fig. 2. — Peritheciis sparsis, minutis, erumpenti-superficialibus, subglobosis minutissime papillatis, atris; ascis cylindraceo-clavatis, breve stipitatis, apice rotundatis, paraphysisibus filiformibus, octosporis, 60-75 \times 13-15; sporidiis distichis, oblongo-fusiformibus, rectis v. curvulis, 3-septatis, ad septa constrictis, uno loculo intermedio paulo crassiore, pallide flavis, 23-27 \times 6-7.

Hab. in interiore leguminum Robiniæ Pseudacaciæ, Lyndonville N. Y. Amer. bor.

13. *Leptosphaeria Lyndonvillæ* Fairman, Ann. Mycol. IV (1906) p. 326, 4068 fig. 1. — Peritheciis sparsis, erumpenti-superficialibus, depresso-globosis v. globoso-lenticularibus, minutissimis, atris; ascis cylindraceo-clavatis, breve stipitatis, apice late rotundatis, rectis vel curvulis, paraphysisibus filiformibus, octosporis, 74-100 \times 10-12; sporidiis distichis (v. rarissime uniseriatis), clavatis, rectis, 6-9-septatis, loculo tertio superiore globoso-incrassato, apice rotundatis, deorsum in cellulas attenuatas desinentibus, sub-constrictis, primo guttulatis, 20-23 \times 6-7, luteo-fuscis.

Hab. in leguminibus Robiniæ Pseudacaciæ, in silvaticis Lyndonville N. Y. Amer. bor. — Ab affinibus *Lept. carpogena* et *Lept. rhopalispore* diversa.

14. *Leptosphaeria Verba* Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4069 (1908) p. 126. — Peritheciis corticolis epidermide velatis, e globoso lenticularibus, subcarbonaceis, sparsis v. hinc inde plus minusve confertis, 90-150 μ . diam., ostiolo vix papillato perforatis; ascis clavulatis sursum subtruncato-rotundatis crasseque tunicatis, basi breviter cuneato-pedicellatis 50-60 \times 8-10, densissime paraphysatis, octosporis; sporidiis oblique distichis, elongato-ellipsoideis, 3-septatis, loculo secundo supero crassiore, chlorino-flavidis, 10-14 \times 3-4.

Hab. ad ramos languidos v. emortuos Ilicis paraguarientis in dumetis circa San Pedro Argentina Amer. austr.

15. *Leptosphaeria Trevoæ* Speg., Fungi Chilenses (1910) p. 79, cum 4070 icon. — Peritheciis primo epidermide tectis dein nudis, gregariis v. subseriatis minutis lenticularibus atris, tenui-membranaceis, vix papillulato-ostiolatis, 250-300 μ . diam.; ascis linearibus breviter pedicellatis parce pseudo-paraphysatis, 4-6-8-sporis, 200 \times 12; spo-

ridiis subellipsoideis saepius 3-septatis atque leniter curvulis, utrinque obtusis intense fuligineis, in asco tunica mucosa vestitis dein nudis, 20-30 \approx 10.

Hab. in ramis emortuis *Trevoæ trinervis* in collibus San Bernardo prope Santjago Chile Amer. austr.

16. **Leptosphæria Sanguisorbæ** Karst. apud Berl. Icon. fung. I, p. 78, 4071 t. 66, f. 4. — Peritheciis sparsis, $\frac{1}{3}$ mm. diam., globosis, tectis, ostiolo breviter papillato erumpentibus; ascis fusoideo-clavatis, brevissime noduloso-stipitatis, octosporis, paraphysatis; sporidiis subtristichis, fusoideis, curvulis, utrinque obtusulis et brevissime appendiculatis, 5-septatis, 32-35 \approx 4-5, sordide flavis, loculo tertio subinde lenissime crassiore.

Hab. in caulinis *Sanguisorbæ officinalis* in Lapponia Rossica (KARSTEN).

17. **Leptosphæria Cercocarpi** Syd., Ann. Mycol. V (1907) p. 339. — 4072 Peritheciis epiphyllis, sparsis v. aggregatis, primo epidermide tectis, dein erumpentibus, applanato-globosis, ca. 175-225 μ . diam., atris, carbonaceis, obtuse papillatis; ascis oblongo-cylindraceis, saepè curvulis, apice rotundatis, basi brevissime stipitatis, 70-90 \approx 20-25, octosporis; sporidiis distichis, oblongis, utrinque rotundatis, 3-septatis, non v. leniter constrictis, flavo-olivaceis, cellula secunda vix crassiore, 26-28 \approx 10-12.

Hab. in foliis emortuis *Cercocarpi ledifolii*, Mill. Creek Camyon, Salt Lake Co. Utah Amer. bor. (A. O. GARRETT).

18. **Leptosphæria Puttemansi** Maubl., Bull. Soc. Myc. Fr. (1905) p. 88, 4073 pl. VI, f. 3. — Maculis amphigenis, rotundatis, saepè confluentibus, ochraceo-ferrugineis, linea angusta atro-fusca cinctis, usque ad 1 mm. latis; peritheciis nigris, plerumque epiphyllis, epidermide tectis, globulosis, 100 μ . diam.; ascis cylindricis, apice rotundatis, paraphysatis, 50-60 \approx 10; sporidiis fusoideis, utrinque obtusiusculis, 3-septatis, non constrictis, eguttulatis, fuligineis, 18 \approx 5.

Hab. in foliis *Eriobotryæ japonicae* in horto botanico Sao Paulo Brasiliæ. — Pycnidia peritheciis similia: sporulis ellipticis, hyalinis, 4-6 \approx 2-2,5.

19. **Leptosphæria Lingue** (Speg.) Sacc. et Trott., *Leptosphærella ?Linguæ* Speg., Fungi Chilenses (1910) p. 77, cum icon. — Maculis nullis; peritheciis sparsis lenticularibus minutis, 100-120 μ . diam., parenchymate innatis, epidermide velatis, saepius epiphyllis, atris, coriacellis; ascis cylindraceis brevissime pedicellatis, 100-110 \approx 10-

15; sporidiis ellipsoideis v. ellipsoideo-navicularibus, olivaceo-fuligineis 2-septatis, cellula centrali obscuriore, 15-20 \times 6-7.

Hab. in foliis dejectis putrescentibus *Persea* Lingue in silvis prope Cerro Caracol de Concepcion Chile Amer. austr.

20. **Leptosphaeria Lauri** Maubl., Bull. Soc. Myc. Fr. (1905) p. 89, pl. VI, 4075 fig. 7. — Peritheciis hypophyllis, sparsis, globosis, nigris in maculis amphigenis superne albidis, inferne ochraceis, sinuosis, fusco-cinctis insidentibus; ascis cylindricis v. subclavatis, breviter pedicellatis, paraphysatis, 110 \times 15, octosporis; sporidiis distichis fusoideis, rectis curvulive, utrinque obtuse attenuatis, 3-septatis, ad septa leniter constrictis, enucleatis, luteolis, 25-30 \times 6-8.

Hab. in foliis Lauri nobilis, Seine-et-Marne Galliæ. — Socia adest *Phyllostictæ* sp. sporulis ovoideis, 6 \times 3, facile pycnidium *Leptosphaeræ*.

21. **Leptosphaeria coniigena** Sacc. et Trott., *Leptosphaeria Conii* Speg., 4076 An. Mus. Nac. Buenos Aires t. XIX (1909) p. 382, non Rostr. — Maculis nullis; peritheciis hinc inde gregariis primo tectis dein nudis sublenticularibus, 200-250 μ . diam., minute papillulato-ostiolatis; ascis subcylindraceis brevissime pedicellatis 70-75 \times 10-12, octosporis, pseudoparaphysibus dense obvallatis; sporidiis distichis ellipsoideo-subfusiformibus, 3-septatis, 16-20 \times 5-6, flavidis.

Hab. ad caules dejectos putrescentes Conii maculati in Silva Santa Catalina, Buenos Aires, Argentina Amer. austr. —

Lept. Dolioi (Pers.) De N. nec non *L. conoidea* De N. valde affinis, ascis sporidiisque conspicue crassioribus distincta.

22. **Leptosphaeria Conii** Rostr. Mykol. Meddel. IX (1905) pag. 311 4077 (Bot. Tidsskr.). — Peritheciis serialiter dispositis, nigris, nitidis; ascis clavatis 80-85 \times 10-13; sporidiis elongato-fusoideis, viridi-flavescensibus, 9-septatis, loculo quarto superiore, tumidiore, 40-50 \times 5.

Hab. in caulibus Conii maculato, Sjælland Køge Dania.

23. **Leptosphaeria utahensis** Ell. et Ev. North Amer. Pyrenom. (1892) 4078 pag. 361. — Peritheciis sparsis v. subgregariis, subcuticularibus, basi fibrillosis, 150-175 μ . diam., e collapso concavis, ostiolo minuto papilliformi praeditis; ascis oblongo-cylindraceis, sessilibus, paraphysatis, 55-60 \times 7-8; sporidiis distichis, oblongo-fusoideis, subinæquilateralibus, 3-septatis, utrinque obtusis, primum flavidis demum opacis, 15 \times 3, diu uniseptatis.

Hab. in ramulis emortuis Umbelliferæ? cujusdam, Pleasant Valley Utah Amer. bor. (S. J. HARKNESS).

24. **Leptosphaeria Ellisiana** Berl., Icon. fung. I, p. 68, t. 55, f. 2, L. 4079

subconica Ell. et Ev. N. Amer. Pyren. n. 697, non C. et P. — Peritheciis sparsis $\frac{1}{4}$ - $\frac{1}{2}$ mm. diam. conoideis, tectis, prominulis, longiuscule et crassiuscule papillatis; ascis tereti-clavatis, brevissime noduloso-stipitatis, 110-120 \times 10-12, paraphysatis, octosporis; sporidiis distichis confertis, fusoideis, leniter curvis, utrinque acutatis, 3-septatis, septo medio leniter constrictis, 32-35 \times 5-6, dilute olivaceis.

Hab. in caulinibus emortuis *Oenotheræ biennis*, Newfield Amer. bor. — A *Lept. argentina* magnitudine sporidiorum imprimis distinguenda.

25. *Leptosphaeria Francoæ* (Spegazz.) Sacc. et Trott., *Leptosphaerella* 4080
Francoæ Speg., Fungi Chilenses (1910) p. 77. — Maculis nullis; peritheciis laxe gregariis, globoso-depressis, pusillis, primo epidermide velatis, vix papillulato-ostiolatis, atris, glabris, membranaceis, 80-100 μ . diam.; ascis cylindraceis a paraphysatis, brevissime cras-sequae pedicellatis, 40-42 \times 8; sporidiis ellipsoideo-subfusoideis parvis, 3-septatis, non v. vix ad medium constrictulis, pallide olivaceis 12-15 \times 4.

Hab. in scapis siccis *Francoæ sonchifoliæ*, Bahia de Coral Chile Amer. austr.

26. *Leptosphaeria Torrendii* Trav. et Spessa, Bol. Soc. Brot. XXV 4081 (1910) pag. 171, t. I, f. 3. — Peritheciis hinc inde subgregariis, epidermide initio tectis dein erumpentibus, globoso-papillatis, 140-200 μ . diam.; nigris, contextu distincte sed minute pseudoparenchymatico, fuligineo; ascis cylindraceo-fusoideis, apice rotundatis, breve pedicellatis, 70-85 \times 8-11, paraphysibus filiformibus obvallatis; sporidiis subdistichis, oblongo-fusoideis, plerumque curvulis v. inaequilateris, utrinque attenuatis, 3-septatis, ad septa vix constrictis, 16-29 \times 5 $\frac{1}{2}$ -7, dilute olivaceis.

Hab. in ramis siccis Ricini communis, pr. S. Bento Coimbra, IV 1903' (A. MOLLER).

27. *Leptosphaeria Lythri* Peck, Bull. Torr. Bot. Cl. XXXIII (1906) 4082 p. 220. — Peritheciis minutis sparsis, depressis, epidermide rupta subtectis, nigris, ostiolo minute papilliformi praeditis; ascis oblongis v. clavatis, 100-150 \times 20-30, subsessilibus; sporidiis oblongis v. subfusoideis rectis v. curvulis, primum hyalinis dein flavidobrunneis, 5-7-septatis, cellula tertia cressiore, 30-40 \times 12-16.

Hab. in caulinibus emortuis *Lythri alati*, Stockton Kans. Amer. bor. (E. BARTHOLEMEW).

28. *Leptosphaeria chilensis* Speg., Fungi Chilenses (1910) p. 78. — 4083

Peritheciis subepidermicis, sparsis v. laxe gregariis, subglobulosis minutis carbonaceis atris 150-180 μ . diam.; ascis cylindraceis breviter pedicellatis, paraphysatis, octosporis, 150 \times 10-12; sporidiis oblique monostichis fusoideis non v. leniter inæquilateralibus, olivaceis, mediocribus, 5-septatis, ad septum medium tantum constrictis, 25-30 \times 7-8.

Hab. in ramis emortuis Lomatiae obliquæ in silvis prope Cerro Caracol de Concepcion Chile Amer. austr.

29. **Leptosphaeria fuscella** (B. et Br.) Ces. et De Not. — Syll. II, 4084 p. 30 — Var. **Syдовiana** Sacc. in Sydow, Mycoh. germ. n. 485 et Ann. Mycol. IV (1906) pag. 484. — Sporidiis utrinque minus obtusis, olivaceis, 20 \times 7; ascis 110-130 \times 8-9.

Hab. in ramis Hippophaës rhamnoidis, Rüdersdorfer Kalkberge pr. Berolinum.

30. **Leptosphaeria Hippophaës** (Sollm.) Sacc., *Sphaeria Hippophaës* Sollm. 4085 Bot. Zeit. (1862) p. 379, tab. XII, f. 23. — Astromatica; peritheciis gregariis, subgloboso-depressis nigris, levibus, cortici interiori immersis, epidermide tectis, eamque hemisphærice protrudentibus, ostiolis papillæformibus, conicis ('ongiusculis) erumpentibus dein supra secedentibus et basim cupulæformem relinquenteribus; nucleo tenaci fulvo; paraphysisibus deliquescentibus; ascis cylindricis 100 μ . longis, octosporis; sporidiis ellipsoideis, utrinque rotundatis, 3-septatis, ad septa non constictis, fulvis, 22-23 \times 10.

Hab. in turionibus corticatis emortuis Hippophaës rhamnoidis, Coburg Germania. — Cl. Winter (Deutschl. Kr. Fl. II, p. 243, 882) ad *Melanomma Hippophaës* Fabr. refert, sed ob perithecia omnino tecta et ostiola longiuscula diversa species videtur. Species a Wintero relata vero est certe Sollmanniana.

31. **Leptosphaeria Azaleæ** Hollós, Ann. Mus. Nat. Hung. VI (1908) 4086 p. 529. — Peritheciis sparsis, epidermide velatis, depresso-globosis, atro-brunneis, ostiolo pertusis, 140-180 μ . diam., contextu celuloso; ascis clavatis, sessilibus, octosporis, 50-70 \times 10-12, filiformi-paraphysatis; sporidiis biseriatis, fusoideis, rectis v. curvulis, 3-septatis, constrictis, loculo secundo superiore plerumque crassiore, luteolis; 18-20 \times 5-7.

Hab. in ramis emortuis Azaleæ spec. in hortis, Kecskemét Hungaria.

32. **Leptosphaeria Physostegiae** Fairm., Proc. Rochest. Ac. of Sc. IV (1906) 4087 p. 216. — Peritheciis parvis, nigris, conicis, erumpentibus, sparsis v. gregariis; ascis oblongo-cylindraceis, 80-85 \times 10; spori-

diis monostichis, 3-5-septatis, ad septa non v. leniter constrictis, pallide brunneis, oblongo-fusoideis, guttulatis, loculis mediis crassioribus, 20-26 \times 6-7.

Hab. in caulis emortuis *Physostegia virginiana*, Lyndonville N. Y. Amer. bor.

33. **Leptosphaeria substerilis** Peck, New York State Mus. Bull. 105 4088 (1906) p. 24. — Foliicola; maculis minutis, 1-2 mm. lat., numerosis, suborbicularibus, saepè confluentibus, plerumque sterilibus, brunneis v. nigricanti-brunneis, linea elevata cinctis; peritheciis paucis, 1-6 in quaque macula, epidermide velatis, nigris, inaequilibus; ascis subcylindraceis v. clavatis, basim versus tenuatis; sporidiis intra ascum confertis, triseptatis, subfusiformibus, coloratis, 25-30 \times 7.

Hab. in foliis vivis *Mentha piperita*, Lakeport, Madison Co. Amer. bor.

34. **Leptosphaeria Zahlbrückneri** Strasser, Verh. zool. bot. Gesellsch. 4089 Wien LVII (1907) p. 315. — Peritheciis nitidis nigris, membranaceis, minutis, primum ostiolo papillulato prominentibus dein liberis globosis; subiculo nullo; ascis cylindraceo-fusoideis, supra obtuse acutatis, 40-50 \times 6-8; sporidiis e hyalino flavidis, acute fufoideis non appendiculatis, saepe curvis, triseptatis, loculo secundo sup. majore, grosse guttulatis, medio fortiter constrictis, 12-16(-20) \times 3-4; paraphysibus filiformibus.

Hab. in caulis siccis *Mentha silvestris*, Sonntagberg Austriae inf. (STRASSE). — *L. setosa* Niessl. affinis sed sporidiis, ascis, subiculo distincta.

35. **Leptosphaeria Periclymeni** Oud. — Syll. IX, p. 780. — var. *tatarica* Potebnia, Myc. St. in Ann. Myc. V (1907) p. 14, fig. 25 et Trav. Soc. Nat. Univers. Kharkow, XXXXVIII (1907) p. 62. — Peritheciis 200-220 μ . cr., pallide brunneis ostiolo brevi praeditis; ascis 100 \times 1.7 longioribus quam paraphysibus; sporidiis pallide flavo-brunneis 26-28 \times 8-9, 3-septatis, constrictis.

Hab. in ramis vivis *Loniceræ tataricæ*, socia *Rhabdospora Xylostei*, Charkow Rossiæ.

36. **Leptosphaeria Tupæ** Speg., Fungi Chilenses (1910) pag. 79. — 4091 Peritheciis laxe gregariis, epidermide velatis, lenticularibus, minutis, atris, vix papillulato-ostiolatis, 100-150 μ . diam.; ascis lanceolato-subcylindraceis parce paraphysatis, brevissime pedicellatis 100-120-10-12, sporidiis subellipsoideis, saepe subnavicularibus, disti-

chis, chlorinis, ad maturitatem 3-septatis, ad medium constrictulis, 16-22 \approx 5-7.

Hab. in pedunculis siccis Lobeliæ Tupæ prope Ciudad de Valdivia, Chile Amer. austr.

37. **Leptosphaeria valdiviensis** Speg. Fungi Chilenses (1910) pag. 80, 4092 cum icon. — Peritheciis laxe gregaris v. subcaespitosis, epidermide sublevata tectis, globulosis carbonaceis atris glabris, minute papillulato-ostiolatis, 150-180 μ . diam.; ascis subcylindraceis breviter pedicellatis paraphysatis, 70-80 \approx 10; sporidiis distichis subacicularibus non v. vix inaequilateralibus saepius 7-septulatis, ad septum medium constrictulis, loculis grosse 1-guttulatis, mediano supero ceteris parum crassiori, chlorinis, mediocribus, 28-38 \approx 4-5.

Hab. in pedunculis emortuis putrescentibus Digitalis purpureæ prope Ciudad de Valdivia Chile Amer. austr.

38. **Leptosphaeria Galii-silvatici** Kirschst., Verh. Bot. Ver. Brandenb. 4093 XLVIII (1906) pag. 56. — Peritheciis confertis sub peridermio nidulantibus, papilla prominentibus, depresso-globosis, nigris, membranaceis, circ. 200 μ . diam., hyphis sparsis brunneis circumdati; ascis clavatis, sessilibus, octosporis, 70-80 \approx 8-10; sporidiis irreguliter 2-v. 3-stichis, fusoideis, rectis v. curvulis, flavidis, 8-11-locularibus, supra conoideo-angustatis, ad septa non constrictis, 24-30 \approx 4-5; paraphysibus filiformibus, 1-2 μ . cr.

Hab. in caulinibus siccis Galii silvatici, Hasellake prope Gross-Behnitz Germaniae.

39. **Leptosphaeria Cynoglossi** Hollós, Ann. Mus. Nat. Hung. V (1907) 4094 pag. 455. — Peritheciis sparsis, superficialibus, depresso-globosis, glabris, nigris, 210-250 μ . diam., ostiolo brevi cylindrico; ascis cylindraceo-clavatis, breve stipitatis, 6-8-sporis, 60-70 \approx 8, filiformi-paraphysatis; sporidiis 2-3-stichis, elongato-fusoideis, rectis v. leviter curvulis, 3-septatis, flavidulis, 30-32 \approx 3,5-4, loculo superiore plerumque paullo crassiore.

Hab. in caulinibus siccis decorticatis Cynoglossi officinalis prope Kecskemét Hungariae.

40. **Leptosphaeria Solani** Romell apud Berlese Icon fung., I, p. 63, 4095 t. 49, fig. 6. — Peritheciis sparsis, globoso-conoideis, tectis, $1\frac{1}{3}$ mm. diam.; ascis tereti-clavatis, brevissime noduloso-stipitatis, octosporis, paraphysatis, 75-85 \approx 9-11; sporidiis distichis, oblongis, utrinque obtusulis, 3-septatis, ad septa, præcipue medium constrictis, olivaceis, 14-16 \approx 6-7.

Hab. in caulinibus Solani Dulcamaræ in Gotlandia Sueciæ

(ROMELL in herb. Sacc.). — A *Lept. sociali* peritheciis multo majoribus imprimis differt.

41. **Leptosphaeria acheniorum** Starb., in Arkiv för Botan. (1905) 4096 pag. 23 (ut var. *L. agnita*) t. I, f. 19 (*L. acheniorum*), extr. — Peritheciis minoribus, rugosiusculis, distincte conico-papillatis, 200-250 μ . diam.; ascis 82-90 \times 9-10; sporidiis tereti-fusiformibus, 6-septatis, ad medium constrictis, 33-35 \times 5.

Hab. in acheniis aridis Mikaniae sp. Tarija Boliviæ.

42. **Leptosphaeria perplexa** Sacc. et Fairm. in Saccardo, Microm. Amer. novi, Journ. of Myc., v. XII (1906) pag. 49. — Peritheciis gregariis, epidermide initio velatis, mox liberis, globosis, basi applanatis, nigris, nitidulis, 250-300 μ . diam., ostiolo conico-acuto, tertiam peritheci partem subæquante præditis, vetustis submuticis; ascis cylindraceis, breve stipitatis, filiformi-paraphysatis, 85-90 \times 10-11, octosporis; sporidiis breve fusoides, utrinque acutulis, curvulis, 3-septatis, non v. vix constrictis, 22-25 \times 5-6, flavidolivaceis.

Hab. in caulis siccis Solidaginis sp., pr. Lyndonville, New York, Amer. bor. — A typica *Lept. doliolæ* (in Angelica etc.) differt peritheciis fere dimidio minoribus et ostiolis typice longioribus et acutioribus. Exemplaria in Dipsaco apud Rehm Ascom. n. 194 potius hanc speciem quam *Lept. doliolum* spectant.

43. **Leptosphaeria agnita** (Desm.) De Not. et Ces. — Syll. II, p. 40 4098 var. *acheniorum* Starb., Ascom. Schwed. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 23, fig. 19. — Peritheciis minoribus, rugosiusculis, distincte conico-papillatis, 200-250 μ . diam.; ascis 82-90 \times 9-10; sporidiis 33-35 \times 5.

Hab. in acheniis aridis Mikaniae, Tarija Boliviæ. — A typo et varietatibus, inter quas præcipue var. *ambigua* Berl., quam maxime affinis, peritheciis minoribus, rugosiusculis nec non matrice recedit.

44. **Leptosphaeria derasa** (Berk. et Br.) Auersw. — Syll. II, p. 41 4099 — f. *robusta* Strass., Verh. k. k. zool. bot. Gesell. Wien, LVII (1907) pag. 315. — A typo differt ascis sporidiisque constanter majoribus: ascis 100-120 \times 16; sporidiis 60-68 \times 4-5.

Hab. in caulis siccis Senecionis nemorensis, Sonntagberg Austriae inf. — Socia adest *Metaspheeria Senecionis* Berl. — Observante cl. Strasser, species ad *Pocospherium* esset ducenda.

45. **Leptosphaeria papillata** (Bon.) Sacc. et Trav. — Syll. XIX p. 1109, 4100 *Myriocarpium papillatum* Bonorden Abhandl. Myk. I (1870) p. 154, Syll. fung. XXII (VI-1912)

t. I, f. 24, non *Amphisphaeria papillata* (Schum.). — Peritheciis laxe gregariis, hemisphærico-conoideis, vix 1 mm. diam., nigris, subsuperficialibus, in verticem tenuato-papillatis; ascis clavatis, apice rotundatis deorsum tenuatis breviterque stipitatis, octosporis, paraphysibus filiformibus ramulosis obvallatis; sporidiis distichis, fusiformibus, rectiusculis, utrinque acutulis, 5-6-septatis, ad septa constrictis, 5-guttulatis, brunneo-olivaceis.

Hab. in ramulis emortuis in Germania. — Forte est species quedam jam edita.

46. **Leptosphaeria Massariella** Sacc. et Speg. — Syll. II, pag. 30 — 4101
var. *brasiliensis* Rehm, Ann. Mycol. V (1907) p. 528. — Peritheciis gregariis, sub epidermide haud mutata nidulantibus, demum in ejusdem rimis perspicuis, globulosis, ostiolo minutissimo prominente, poro pertusis, glabris, atris, ca. 0,35-0,4 mm. diam., contextu parenchymatico membranaceo, fusco; ascis cylindraceis, 2-4-sporis apice rotundatis, crasse tunicatis, 130 \approx 15; sporidiis ellipsoideis, rectis, 1-, dein 3-septatis, medio valde constrictis, flavofuscis, 25 \approx 10; paraphysibus filiformibus, hyalinis, 2 μ . crassis.

Hab. in ramulo? Sao Paulo, Brasilia (USTERI). — A typo imprimis sporidiis majoribus et subquaternis dignoscitur.

47. **Leptosphaeria cylindrostoma** Starb., Ascom. Schwed. Chaco-Cor- 4102
dill. Exp. in Arkiv f. Bot. Bd. V (1905) p. 23, fig. 18 a-b. — Peritheciis sparsim gregariis, matrice infossis, sphæroideis vel sphæroideo-lenticularibus, ad basim filamentis mycelialibus, flexuosis, repentibus parcissime obsessis, ostiolo cylindrico, longiusculo erumpentibus, atratis, c. 100 μ . diam.; ascis octosporis, cylindraceo-clavatis, sursum rotundatis, deorsum fere sessilibus, 76-83 \approx 11-11,5; sporidiis plerumque quatuor vel quinque superioribus distichis v. conglobatis, inferioribus oblique imbricatim monostichis, clavulatim ellipsoideo-oblongatis, inæquilateralibus vel fere curvulis, triseptatis, ad septa interdum lenissime constrictulis, loculis plerumque guttulatis, fuligineo-nigricantibus, 16,5-19 \approx 5-6,5; paraphysibus simplicibus, filiformibus, hyalinis.

Hab. in caulinis (?) prope Laguna de la Brea, prov. Jujuy Argentinæ. — Peritheciis cylindrice et longiuscule ostiolatis, forma sporidiorum distincta videtur. Matrix non indicata.

48. **Leptosphaeria acutiuscula** Berl. Icon. fung. I (1894) p. 86 (in textu) 4103
t. 80, f. 1 (sub *L. acuta*), *L. acuta* Rehm, non M. et N. — Peritheciis subgregariis, globoso-conicis, subcutaneo-erumpentibus, demumque liberis, $1\frac{1}{2}$ - $1\frac{1}{2}$ mm. alt., sursum longiuscule et obtusiu-

scule acutatis; ascis cylindraceis, prælongis, 156-165 \times 10-12, brevissime noduloso-stipitatis, paraphysatis, octosporis; sporidiis tereti-fusoideis, 48-52 \times 4-5, rectis curvulis, utrinque obtusulis, 10-12-septatis, loculis 4°, 5° et 6° paullo incrassatis, olivaceis.

Hab. in caulis Urticæ in Germania (REHM).

49. *Leptosphaeria Salsolæ* Hollós, Ann. Mus. Nat. Hung. IV (1906) 4104

p. 385. — Peritheciis dense gregariis, epidermide tectis, erumpentibus, depresso-globosis, atris, carbonaceis, corrugatis, 400-450 μ . diam., ostiolo minutissimo; ascis cylindraceo-clavatis, brevi-stipitatis, 4-8-sporis, 80 \times 10-12, filiformi paraphysatis; sporidiis distichis, fusoideis, rectis v. leviter curvulis, utrinque leniter attenuatis, obtusatis, 5-septatis, flavidulis, 40-52 \times 6, loculis omnibus guttulatis v. eguttulatis, loculo tertio superiore semper crassiore.

Hab. in caulis siccis Salsolæ Kali prope Izsak Hungaricæ. — A *Lept. Lecanora* H. Fab. differt sporidiis multo majoribus.

50. *Leptosphaeria livida* Voglino, in Annal. R. Accad. Agricolt. To-

riño, LIII 1910 (1911) p. 352. — Maculis sparsis, rhomboideis v. irregularibus, plerumque margine sinuosis, epiphyllis, albo-griseis, 1,2-4 mm. latis; peritheciis paucis, sparsis, minutis, punctiformibus, globosis, subimmersis, late pertusis; ascis clavato-oblongis, rectis, brevissime stipitatis, 60-70 \times 10; paraphysibus filiformibus; sporidiis distichis, fusoideis, 5-septatis, ad septa leniter constrictis, olivaceis, 24-26 \times 4.

Hab. in foliis vivis Populi canadensis, Santena, Villastellone, Pancalieri Italie bor.

51. *Leptosphaeria Ephedræ* Maubl. Bull. Soc. Mycol. Fr. (1905) p. 88, 4106

pl. VI, f. 4. — Peritheciis minimis, sparsis, nigris, subglobosis, immersis 150-200 μ . diam.; ascis cylindricis, rectis vel curvulis, sessilibus, 65-75 \times 10-12, octosporis, filiformi-paraphysatis; sporidiis monostichis saepius superius distichis, 3-septatis, medio constrictis, loculo superiore paullo latiore et apice leviter tenuato, inferiore obtuso, olivaceo-melleis, 14-16 \times 5-6.

Hab. in ramulis emortuis Ephedræ distachyæ in arenosis prope ostium Ligeris Galliæ, socia *Anthostomella Distachyæ*.

52. *Leptosphaeria irrepta* Niesl in Linhart, Fungi Hung. exsicc. n. 64, 4107

c. ic. (1882). — Peritheciis epiphyllis nunc sparsis, nunc subgregariis, hemisphaericis, tectis, ostiolo conico apiceque erumpentibus coriaceo-duris, atris, glabris, nitidis; ascis clavatis in stipitem brevem attenuatis, 55-70 \times 9-10, octosporis; sporidiis distichis oblon-

go-lanceolatis utrinque obtusis breviterque appendiculatis, 4-guttatis, dein 1-septatis, postremo verisimiliter 3-septatis, ad septa, præcipue medium constrictis, e subhyalino fuscidulis; 14-16 \approx 4; paraphysibus copiosis, simplicibus v. apice furcatis, filiformibus, ascis superantibus.

Hab. in foliis Cycadis revolutæ cultæ sub dio, Fiume.

53. **Leptosphaeria Arecæ** Giuditta Mariani, in Atti Soc. it. Sc. nat. 4108 L (1911) pag. 165, fig. 2. — Peritheciis sparsis, globulosis, atris, erumpentibus, 150-200 μ . diam., contextu distincte pseudoparenchymatico, violaceo-fusco; ascis clavatis, breviter stipitatis, 55-70 \approx 12-14, paraphysibus copiosis acum sæpe superantibus obvalbatis; sporidiis distichis, fusoideis, subcurvuluis vel inæquilateris, 3-septatis, utrinque obtusis et appendicula crassiuscula, loculiformi, hyalina auctis, 25-28 \approx 6-7, sine appendicibus 16-19 μ . longis.

Hab. in foliis languidis vel emortuis Arecæ sapidæ in Horto Botanico Conimbricensi Lusitaniae (A. MOLLER). — Inter *Leptosphaerias* palmicolas species valde distincta ob sporidia utrinque appendiculata. Sociæ adsunt: *Diplodia depazoides* Dur. et Mont. f. *Arecæ*; *Hendersonia Sabaleos* Ces. var. *Arecæ*, qui fungilli verisimiliter status secundarii sunt.

54. **Leptosphaeria Molleriana** d'Almeida et da Camara, Bol. Soc. Bro- 4109 ter. XXIV (1908-1909), Extr. p. 18. — Peritheciis sparsis, epidermide tectis, globoso-depressis v. subglobosis, atris, poro pertusis, 200-250 μ . diam.; ascis obclaviformibus, sessilibus v. lenissime stipitatis, paraphysatis, 80-90 \approx 12-13; sporidiis fusoideis, utrinque rotundatis, distichis, triseptatis, sæpe curvulis, melleis, 22-25 \approx 6-7.

Hab. in foliis Cocoës Romanzoffianæ, in Horto botanico Coimbra Lusitaniae (A. MOLLER). — A *Lept. Cocoës* facile distingueanda.

55. **Leptosphaeria Desmonci** Syd., Hedwigia XLIX (1909) p. 79. — 4110 Peritheciis globosis, 250-300 μ . diam., ostiolo minuto erumpente, atris, membranaceo-carbonaceis; ascis cylindraceo-clavatis, apice incrassatis, brevissime stipitatis, 70-160 \approx 20-32, octosporis, copiose paraphysatis; sporidiis distichis, fusoideis, utrinque attenuatis, primo 1-septatis, hyalinis, tandem 3-5-septatis, flavidulis, loculo uno medio crassiore, medio constrictis, 42-60 \approx 6-11.

Hab. in ramis Desmonci, Para Americæ austr. (C. F. BAKER).

56. **Leptosphaeria parvula** Niessl — Sacc. Syll. p. 169. — var. *Iridis- 4111 germanicæ* C. Mass., Novit. Fl. mycol. Veron. n. 291 et Osserv. fitol., in Madonna Verona v. II (1908) Extr. p. 10. — Ascis elong-

gato-clavatis 50-65 \times 10-14, paraphysibus filiformibus obvallatis, octosporis; sporidiis distichis, obscure olivaceis, fusiformi-oblongis, utrinque rotundatis, 1-3-septatis ad septa vix subconstrictis, 14-18 \times 6-7.

Hab. in foliis languidis Iridis germanicæ prope Tregnago in agro Veronensi Italia bor.

57. **Leptosphaeria Iridis** Hollós, Ann. Mus. Nat. Hungar. V (1907) 4112 pag. 45. — Peritheciis sparsis, parenchymate foliorum immersis, globulosis, nigris, ostiolo conico pertuso, 280-320 μ . diam., contextu parenchymatico; ascis clavatis, sessilibus, 200-280 \times 100-120, octosporis, paraphysatis; sporidiis inordinate distichis v. congregatis, fusoideis, 4-septatis, ad septa constrictis, dilutissime luteolis. 76-86 \times 18-26.

Hab. in foliis siccis Iridis arenariae, prope Kecskemét Hungariæ.

58. **Leptosphaeria socialis** Berlese, Ic. fung. I (1894) p. 63, t. 49, f. 5. 4113 — Peritheciis sparsis v. subgregariis, tectis, globoso-conoideis, 120-130 μ . diam.; ascis paraphysatis, tereti-fusoideis, brevissime noduloso-stipitatis, 60-65 \times 12-16, octosporis; sporidiis distichis oblongis, utrinque obtusulis, 3-septatis, leniter constrictis, fulvo-olivaceis, 15-18 \times 5-6, rectis.

Hab. in caulinis Asparagi officinalis in Fennia, sociis *L. præclara*, *L. Asparagi* et *L. punctoidea*.

59. **Leptosphaeria Alpiniae** Maubl. Bull. Soc. Myc. Fr. (1905) p. 89, pl. VI, 4114 f. 5. — Peritheciis minimis, immersis, atris, globosis, 100 μ . diam., sursum in collum crassum breve 25 μ . long., 30 μ . cr. desinentiibus; ascis cylindrico-clavatis, rectis v. curvulis, breviter stipitatis, octosporis, 50 \times 8-10, paraphysatis; sporidiis distichis, fusoideis, saepe curvulis, 3-septatis, ad septa non constrictis, flavidobrunneis, 18 \times 4-5:

Hab. in foliis maculatis Alpiniae nutantis in horto bot. Sao Paulo Brasiliæ (PUTTEMANS).

60. **Leptosphaeria musicola** (Speg.) Sacc. et Trott., *Leptosphaerella musicola* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 382. — Maculis effusis indeterminatis sordide fuscescensibus; peritheciis innato-erumpentibus sparsis, atris, e globoso subpiriformibus, 120-125 μ . diam.; ascis obclavulatis, a paraphysatis octosporis, breviter pedicellatis 60 \times 12; sporidiis subfusoideis, 3-septatis, ad septa leniter, ad medium validius constrictis, olivaceis, 18-24 \times 6.

Hab. ad folia putrescentia Musæ paradisiacæ in arvis circa

Orán Rep. Argentina Amer. austr. — An a *Leptosphaeria Musarum* Sacc. et Berl. satis distincta?

61. **Leptosphaeria Cannæ** Mac Alp. Austral. Fung. Dec. I-II, p. 375 4116
 (Proceed. Linn. Soc. New S. Wales, 1902). — Peritheciis sparsis,
 minutis, nigris, erumpentibus, depresso-globosis, membranaceo-co-
 riaceis, poro apicali munitis; ascis elongato-clavatis, in basim at-
 tenuatis, octosporis, 90 \times 20-21; paraphysibus filiformibus copiosis
 ascis aequalibus; sporidiis distichis, fusoideis, utrinque obtusis,
 olivaceis, 3-4-septatis, pro more curvulis et ad septa constrictis,
 16 \times 6,5-8.

Hab. in pagina superiore albo-maculata foliorum Cannæ in-
 dicæ, Armadale pr. Melbourne Australiæ.

62. **Leptosphaeria maritima** Hollós, Ann. Mus. Nat. Hungar. V (1907) 4117
 pag. 46. — Peritheciis epidermide velatis, sparsis gregariisve, de-
 presso-globosis, fuscis, ostiolo papillato perforato, 180-230 μ . diam.,
 contextu parenchymatico; ascis ellipsoideis v. clavatis, breve sti-
 pitatis, apice rotundatis et incrassatis, octosporis, 80-110 \times 26-32;
 sporidiis 2-3-stichis, fusoideis, rectis v. curvulis, 3-septatis, non
 v. vix constrictis, flavo-brunneis, 42-52 \times 10-14.

Hab. in caulinis et foliis siccis Triglochinis maritimis,
 prope Izsák Hungariæ. — A *Leptosphaeria triglochincola* Curr. et
L. Triglochinis Sacc. diversa.

63. **Leptosphaeria Rusci** (Wallr.) Sacc. — Syll. II, p. 74. — Var. **Hy-
 pophylli** Maire, in Bull. Soc. bot. France, LVI (1909) [ed. 1911]
 p. CCLXXII, f. 3. — A typo differt sporidiis pro more 3-septatis,
 nec 4-septatis, majusculis: nempe 28-35 \times 6,5-7, nec 17-25 \times 4-5.

Hab. in cladodiis emortuis Rusci Hypophylli in Tunisia.
 — *Lept. ruscicola* Karst. et Har. — Syll. IX, p. 785. — sec. cl.
 Maire l. c. et juxta exempl. orig. dignoscitur peritheciis duplo
 majoribus, 300-400 μ ., sporidiisque 1-3-septatis, 24-28 \times 4-5.

64. **Leptosphaeria Muscari** Hollós, Ann. Mus. Nat. Hungar. VII (1909) 4119
 pag. 51. — Peritheciis sparsis v. gregariis, epidermide tectis, de-
 presso-globosis, glabris, nitidis, nigris, ostiolo papillato erumpente,
 250-280 μ . diam., contextu celluloso; ascis clavatis, breve stipitatis,
 octosporis, 64-70 \times 10-12, filiformi paraphysatis; sporidiis distichis
 v. interdum oblique monostichis, cylindraceo-oblongis, utrinque ro-
 tundatis, curvulis, 2-septatis, ad septa constrictis, 3-guttulatis, fla-
 vidulis, demum brunneis, 16-18 \times 6-7.

Hab. in caulinis siccis Muscari comosi prope Kecskemét
 Hungariæ.

65. **Leptosphaeria Baldratiana** Bacc., Funghi Eritrea, Ann. Bot. IV 4120 (1906) p. 274. — Peritheciis minutis; ostiolo prominulo; sub epidermide nidulantibus, in maculis aridis, arcte limitatis, sparsis, $\frac{1}{2}$, mm. et ultra latis; ascis clavulatis 76×12 , paraphysatis, paraphysibus filiformibus; sporidiis distichis, ellipsoideis transversim 5-6-septatis 23×5 , hyalinis.

Hab. in foliis Sansevieriæ Ehrenbergianæ in montibus Arbaraba et Mahdet Erythrææ (PAPPI).

66. **Leptosphaeria Cordylines** (Speg.) Sacc. et Trott., *Leptosphaerella* 4121 *Cordylines* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 381. — Maculis nullis; peritheciis amphigenis adnatis sparsis v. laxissime gregariis e globoso conoideis 100-125 μ . diam., ostiolo papillulato perforante præditis; ascis obclavulatis subsessilibus 55-65 \times 10-12, aparaphysatis, octosporis; sporidiis fusoideis, di-tristichis, 22-24 \times 5-6, flavidulis.

Hab. ad folia arida *Cordylines dracænoides* in horto Santa Catalina Buenos Aires Rep. Argentina, Amer. austr.

67. **Leptosphaeria petkovicensis** Bubák et Ranojevic, Ann. Myc. VIII 4122 (1910) p. 361. — Peritheciis in caulis æque distributis, globosis, papilla conoidea prominenti præditis, dein parum apertis, nigris, 100-200 μ . diam., contextu parenchymatico obscure brunneo; ascis elongatis, utrinque angustatis, supra rotundatis et incrassatis, infra in pedicellum crassum attenuatis, 65-80 \times 15-20; sporidiis fusoideis, rectis vel curvulis, utrinque attenuatis, 3-septatis, ad septa non constrictis, 38-50 \times 4-5, pallide flavo-stramineis; paraphysibus filiformibus.

Hab. in caulis siccis Junci effusi prope Petkovica, Serbia (Sr. DOZUDIC).

68. **Leptosphaeria Schneideriana** (Rick) Rick in litt., *Trematosphaeria* 4123 *Schneideriana* Rick Broteria V (1906) p. 47. — Peritheciis majusculis, 1 mm. diam., atris, immersis, dein semi-immersis, orbiformibus, obtuse ostiolatis, rugosis, carbonaceis; ascis 170-250 \times 30-40 (parte spor.), tenuiter tunicatis, octosporis; sporidiis multiserialibus, curvulis, fusoideis, primitus hyalinis, denique fuligineis, 3-septatis, 50-60 \times 12 (in medio), in septo vix constrictis, cellulis interioribus æqualibus, exterioribus attenuatis; paraphysibus conglutinatis, indeterminatis, stratum mucosum validum ascos superantibus formantibus, hyalinis v. viridulis.

Hab. in Bambusa, Rio Grande do Sul, Brasiliæ. — *Leptosph. arundinaceæ* (Schw.) Sacc. similis.

69. *Leptosphaeria eremophila* (Speg.) Sacc. et Trott., *Leptosphaerella* 4124
eremophila Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 381. — Maculis nullis v. melius substrato fere toto sordide are-scenti-cinerescente; peritheciis globulosis 70-80 μ . diam., sparsis, parenchymate innatis, saepius ad hypophyllum leniter prominulis atque ostiolo vix papillato subfimbriato epidermidem perforante sed non exerto nigro manifestis; ascis subclavatulis subsessilibus v. minutissime pedicellatis, 38-40 \times 8, octosporis apophysatis; sporidiis subfusoideis, saepius inaequilateralibus, 3-septatis, 15 \times 4, ad septum medium tantum constrictis, hyalinis v. chlorinis.
Hab. ad folia arida Sporoboli asperifolii in pratis circa Mendoza Rep. Argentina Amer. austr.
70. *Leptosphaeria intermedia* Niessl, Hedw. XXVI (1887) p. 46-48, 4125 fig. 3 (sporidia). — Peritheciis et ascis non descriptis; sporidiis fusoideis, rectis, utrinque acutulis, 5-septatis, 6-guttulatis, ad septa constrictulis, coloratis.
Hab. in culmis Calamagrostidis sp. et Sorgii hale-pensis in Moravia, Rhenogovia et Hungaria. — *Lept. Fuckelii* et *Lept. ogilviensis* affinis. Postremæ habet sporidia similia, sed breviora et crassiora.
71. *Leptosphaeria Sparti* Fl. Tassi, Bull. Lab. Ort. Bot. Siena (1905) 4126 p. 60, tab. I, fig. 1-4. — Peritheciis seriatis, epidermide volatis tandem erumpentibus, globoso-depressis, nigris, 150-200 μ . diam., anguste pertusis; ascis elongato-clavulatis 60-70 \times 10-12, apice rotundatis, brevissime stipitellatis, paraphysibus, aequilongis, 4-5 μ , crassis obvallatis, 8-sporis; sporidiis distichis, oblongis, rectis vel curvulis, 2-septatis ad septa constrictis, loculo medio subgloboso paullo crassiore, eguttulatis, flavidis, 16-18-20 \times 7-7,5-8.
Hab. in culmis vaginisque Lygei Sparti in horto botanico Senensi Italæ. — Verisimiliter statui escophoro spectant formæ inferiores ad genera *Diplodinula*, *Stagonosporina*, *Microdiplodia*, *Hendersonulina*, *Stagonospora*, *Hendersonia* pertinentia, teste Tassi.
72. *Leptosphaeria cumulata* Kirschst., Verh. Bot. Ver. Brandenburg XLVIII (1906) pag. 56. — Peritheciis arcte confertis, globosis, nigris, mollibus, basi hyphis brunneis obsitis, ostiolo punctiformi prominulis, v. omnino immersis; ascis elongato-clavatis, supra rotundatis, breviter pedicellatis, 105-120 \times 8-10, octosporis; sporidiis cylindraceis, primum hyalinis, dein flavis, usque 12-locularibus, loculo tertio globoso prominenti, distichis v. oblique pluries seriatis, rectis, guttulatis, 40-50 \times 3-4; paraphysibus filiformibus.

Hab. in culmis putrescentibus *Phragmitis*, Gross-Behnitzer See Germaniae. — A *L. graminis* (Fuck.) peritheciis immersis, ascis sporidiisque minoribus angustioribusque diversa.

73. **Leptosphaeria iwamotoi** I. Miyake, Pilze Reispfl. Japan (Journ. 4128

College Agricul. Tokyo, II (1910) p. 249, t. XIII, f. 18-19. — Peritheciis globosis immersis papilliformi-prominentibus, obscure brunneis, 75-125 μ . diam.; ascis elongato-cylindraceis, 55-60 \times 11-13, octosporis, paraphysibus æqualiter incrassatis dimidiatae ascis partem vix æquantibus; sporidiis distichis, ellipsoideis, brunneis, biseptatis, ad septa constrictulis, granuloso-farctis, 12,5-18 \times 3,7-5.

Hab. in foliis *Oryzae sativæ* in Japonia.

74. **Leptosphaeria Spegazzinii** Sacc. et Syd. — Syll. XIV p. 570. — 4129

var. *minor* Spegazzini, An. Mus. Nac. Buenos Aires t. XIX (1909) p. 383. — Peritheciis 100-120 μ . diam., ascis 60-65 \times 10; sporidiis 16-18 \times 4-4,5.

Hab. ad culmos *Sacchari officinarum* prope Ledesma, Jujuy, Argentina Amer. austr. — Varietas a typo (*L. Sacchari* Speg. non Bred.) omnibus partibus conspicue minoribus recedit.

75. **Leptosphaeria kerguelensis** P. Henn., Deutsche Südpolar-Exped. 4130

Bd. VIII (1906) Extr. p. 11, tab. II, fig. 7 a, b. — Peritheciis innato-suberumpentibus, ostiolatis, amphigentes, subglobosis, atro-membranaceis, 150-180 μ . diam.; ascis clavatis, apice obtuse rotundatis, basi curvatis, octosporis, 50-70 \times 10-17; paraphysibus filiformibus, hyalinis, 1-1,5 μ . cr., flexuosis; sporidiis subdistichis v. subtristichis, fusoideis, utrinque rotundatis, 3-septatis, constrictiunculis, rectis vel curvulis, flavo-olivaceis, dein atro-fuscis, 15-20 \times 5-7.

Hab. in foliis *Festucæ kerguelensis*, Kerguelen-Station prope Zeltlager (E. WERTH).

76. **Leptosphaeria culmifraga** (Fr.) Ces. et De Not. — Syll. II, p. 75 4131

— var. *alpestris* Rehm, Oest. bot. Ztschr. LVI (1906) p. 297. — (Nomen nudum).

Hab. in culmis Graminacearum, Zittertal sub Pfitscher-Joch, Austria.

77. **Leptosphaeria larvalis** Saccardo, Fungi aliquot africani, Bol. Soc. 4132

Broteriana v. XXI (1904-1905) p. 5. — Peritheciis hinc inde laxe gregariis, innato-erumpentibus, globulosis, 300-400 μ . diam., obsolete papillatis, nigris, glabris, membranaceo-coriacellis; contextu grosse parenchymatico, fuligineo-rufescens; ascis è cylindraceo subclavatis, deorsum tenuatis, apice obtusis, 170-190 \times 25, filiformi-

paraphysatis, octosporis; sporidiis distichis cylindraceo-fusoideis, magnis, 80-85 \times 10-12, utrinque obtuse tenuatis, saepius curvulis, 10-11-septatis, non constrictis, fusco-olivaceis, grosse 11-12-nucleatis, nucleis pallidioribus, articulo altero supra medium paullulo crassiore.

Hab. in caulinis emortuis Equiseti pallidi in insula S. Thiago Cabo Verde, Africa (comm. A. MOLLER). — Ab affini *L. Equiseti* ascis sporidiisque multo majoribus imprimis differt.

78. **Leptosphaeria Geasteris** Hollós, Ann. Mus. Nat. Hungar. V (1907) 4133 p. 279. — Peritheciis gregariis v. sparsis, erumpentibus, depresso-globosis, fuscis, apice pertusis, 170-210 μ . diam., contextu parenchymatico; ascis cylindraceis, breve stipitatis, 6-8-sporis, 60-70 \times 7-8, filiformi-paraphysatis; sporidiis distichis, fusoideis, rectis vel leviter curvulis, 5-septatis, flavidulis, 18-22 \times 3-4.

Hab. in stratu interno exoperidii *Geasteris* pseudolimbatii, prope Kecskemét Hungariae.

79. **Leptosphaeria fibrincola** v. Höhn. et Rehm, Ann. mycol. (1905) 4134 p. 228, Rehm. Ascom. Exicc. n. 1591. — Peritheciis dispersis, primitus innatis, dein emergentibus, globulosis, papillula minima vix conspicua, demum urceolato-collabentibus, ad basim hyphis crebris, simplicibus, septatis, fuscis, longis, 3-4 μ . lat., chartam longe percurrentibus, versus apicem setulis acutis, fuscis, brevibus sparsis ob sessis 250-300 μ . diam.; contextu parenchymatico, fuscus; ascis clavatis, apice rotundatis, 4-8-sporis, 70-80 \times 10-12; sporidiis oblongis, rectis, transverse 3-septatis, ad septa interdum paullulum constrictis, cellula secunda latiore, hyalinis, dein dilute flavidulis, 20 \times 4-4,5, distichis, paraphysibus filiformis, septatis, 3 μ . cr.

Hab. ad chartam putridam, Augustæ Vindelicorum (BRITZEL-MAYR). — A *Leptosph. papyrogena* et *Lept. (Pocosphearia) setulosa* satis distincta.

80. **Leptosphaeria Typharum** (Desm.) Karst. — Syll. II, pag. 64 — 4135 ***Leptosphaeria papyrogena** Sacc. Ann. Mycol. VI (1908) p. 558. — A typo differt ascis longioribus, nempe 130-160 \times 15-20; sporidiis paullo majoribus, 30 \times 11-12, pariter olivaceo-melleis; peritheciis 200-250 μ . diam. charticolis.

Hab. in charta putrida, Rigny sur Arroux Galliae, Majo 1908 (FLAGEOLET).

Subg. *Xenosphæria* Trev. Species lichenicoleæ.

81. *Leptosphæria bæomycearia* (Linds.) Sacc. et Trott., *Microthelia* 4136
bæomycearia Linds. Lichenic. Microfungi, p. 541, t. XXIV, f. 6 (1869). — Peritheciis minutissimis, dense gregariis, nigris, punctiformibus, globulosis, basi immersis; ascis (non descriptis); sporidiis oblongo-fusoideis, utrinque obtusulis, majusculis, 3-septatis, ad septa constrictis, saepe 4-guttulatis, brunneis, 24-26 \times 7-8.

Hab. in thallo *Bæomyctis* (Sphyriddii) rufi, Balthayock.
 — Verisimiliter eadem ac *Lept. sphyridiana* (Lahm, 1874) Wint.
 — Syll. IX, p. 796.

POCOSPHÆRIA Sacc. Syll. II p. 32, XI p. 325, XIV p. 571, XVI p. 518.

1. *Pocospheæria Dendromeconis* Earle, Bull. of the New York Bot. 4137
 Gard. (1904) p. 293. — Peritheciis lineariter gregariis, infossis
 dein erumpentibus, primum pilis brevibus brunneis vestitis, de-
 cum subglabratib, nigris, duris, subcarbonaceis, non collabescen-
 tibus, 250-350 μ . cr., ostiole inconspicuo; ascis cylindraceis 100-120
 \times 9-10; paraphysibus copiosis, filiformibus; sporidiis monostichis,
 pallide fuscis v. flavidis, 3-septatis, ad septa constrictis, loculo
 medio leniter inflato, cellulis extremis conoideis acutisque, ceteris
 rotundatis, 18-20 \times 7-8.

Hab. in ramis emortuis Dendromeconis prope Standford
 Univ. California Amer. bor. (LE ROY ABRAMS).

2. *Pocospheæria balcanica* v. Höhn., Fragm. z. Myk., in Sitzb. k. Ak. 4138
 d. Wissensch. Wien, Bd. CXVI, Abt. I (1907) p. 111. — Peritheciis
 immersis in areis nigricantibus, lineatis, 2-10 mm. long. stroma-
 toideis gregarie insidentibus, membranaceo-firmis, nigris, globosis,
 apice in rostellum crassiusculum conoideo-attenuatis, 200-350 μ . lat.,
 basi hyphis firmis saepe fasciculatis, obscure brunneis, 8-12 μ . cr.
 apice setulis obtusis, brunneis, plerumque quadrilocularibus, 80 \times
 6-7 præditis; paraphysibus numerosis, filiformibus; ascis crasse
 clavatis, sessilibus, supra rotundatis, crasse tunicatis, octosporis
 105-140 \times 22-26; sporidiis 2-3-stichis, cylindraceo-clavatis, utrin-
 que rotundato-obtusis et angustatis, semper sexlocularibus, pallide
 brunneis, apice utrinque cupula mucosa subhemisphærica vestitis,
 40-44 \times 10-11.

Hab. in caulinis siccis *Veronicæ gentianoides*, Cej in

Romania (LOITLESBERGER). — *L. Morthierianæ* Sacc. verisimiliter affinis.

VENTURIELLA Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 379. (Etym. a *Venturia* cuius est analogum genus). — Perithecia superficialia subiculo destituta, hirsuta. Asci octospori paraphysati; sporidia fusoidea pluriseptata, olivascentia. — Est *Venturia* phæophragmospora.

1. **Venturiella argentinensis** Speg. l. c., pag. 379 cum icon. — Peritheciis lenticulari-subhemisphæricis, 120-140 μ . diam., pilis minutis unicellularibus 40-60 \approx 4-6; ascis subcylindraceis breviter pedicellatis 70-75 \approx 8-9; sporidiis 5-septatis, 18-20 \approx 4-5, e chlorino oliveis.

Hab. ad strata lignea ramorum excæsorum subputrescentium Pircuniæ dioicæ in Silva Santa Catalina, prope Buenos Aires Rep. Argentina Amer. austr.

MASSARIA De Not. — Syll. II p. 2, IX p. 759, XI p. 319, XIV p. 561, XVI p. 510, XVII p. 732.

1. **Massaria bihyalina** v. Höhn. Fragm. Mykol. IX (1909), in Stzb. 4140 k. Ak. d. Wiss. Wien CXVIII, Abt. I, pag. 1503. — Peritheciis ligno v. cortice immersis, sparsis, saepe seriatis, raro 2-3-approximato-confluentibus, depresso globosis, 800 μ . circ. diam., 470-520 μ . alt., rostello tunc verruciformi tunc usque ad 2 mm. longo, 350-400 μ . cr., apice ostiolato præditis; contextu nigro, coriaceo, opaco 40 μ . cr.; rostello basi saepe breviter setuloso, primum viridi-pulveraceo demum nigro glabro; paraphysisibus immersis, ascis superantibus, mucosis, guttulatis, 2-2,5 μ . cr.; ascis tenuiter tunicatis, clavatis, basi in pedicellum 36-44 \approx 3-6 abrupte angustatis, supra rotundatis 170-200 \approx 16-21, plerumque octosporis; sporidiis monovalvulis distichis, ellipsoideo-fusoideis, plerumque 6-locularibus, crasse tunicatis, 32-44 \approx 11-12; loculis terminalibus hemisphæricis v. obtuse conoideis, hyalinis, tenuiter tunicatis, 3-4 μ . long., loculis 4 intermediis crasse tunicatis, brunneis, contentu oleoso præditis, ad septa non constrictis, loculis 2 internis 9-10 μ . ceteris 5 μ . longis.

Hab. in ramis putrescentibus Berberidis vulgaris prope Ybbsitz in Austria inf. (P. LAMBERT). — A cæteris speciebus in Berberide vigentibus bene distincta.

2. **Massaria galeata** v. Höhn. Ann. Mycol. (1905) p. 403 cum icon. 4141 — Peritheciis globosis parum depresso et mutua pressione sub-

angulosis, ostiolo vix conspicuo, brunneis, contextu membranaceo-coriaceo, 400-500 μ . diam., solitariis v. usque ad 20 valsiformi-aggregatis, sub peridermio nidulantibus et fere semper tectis; ascis clavatis, 170-200 \times 33-40, plerumque octosporis; paraphysibus numerosis, multiguttulatis, filiformibus; sporidiis distichis v. tristichis, brunneis 6-raro 7-locularibus, crasse tunicatis, ad septa non constrictis, elongato-cylindraceis, utrinque rotundatis, 42-58 \times 14-16, apice utrinque strato mucoso lato, campanuliformi tectis et tunc usque ad 76-86 μ . long.

Hab. ad ramulos Aceris Pseudoplatani prope Mödling et Puchberg Austriae inferioris.

3. **Massaria Aceris** (Schulzer) Sacc. et Trav. Syll. XX p. 28., *Splanchnonema Aceris* Schulz. v. Mügg. in Verhandl. zool.-bot. Gesellsch. Wien (1865) p. 795, t. XVI, fig. 4 (sine diagnosi). — Peritheciis (non descriptis); sporidiis (ex icono) initio hyalinis oblongis, didymis, 4-guttatis, maturis cylindraceis, utrinque obtuse rotundatis, 5-septatis, ad septa subconstrictis, septulo 1 longitudinali auctis, fuligineis, strato mucoso tenui (ut videtur) cinctis.

Hab. in ramis Aceris campestris in Hungaria. — Ignotis peritheciis et dimensionibus fructificationis species omnino incerta. — An *Pleomassaria*?

4. **Massaria scoparia** Rehm, Ann. Mycol. IV (1906) p. 402. — Pe. 4143
ritheciis dispersis, sub peridermio nidulantibus, papillula minima prominente, globulosis, atris, parenchymatice contextis, glabris, 350 μ . diam.; ascis clavatis, crasse tunicatis, 90-110 \times 18-25, octosporis; sporidiis oblongis v. oblongo-clavatis, utrinque rotundatis, 3-septatis, medio, minus ad cetera septa, subconstrictis, fuscois, demum episporio scabriusculo, strato mucoso lato obductis, 21-25 \times 8-10, distichis; paraphysibus filiformibus.

Hab. in caulis emortuis Sarothamni scoparii prope Rüdisbronn Germaniae (REHM). — A *M. stipata* Feltg. diversa.

5. **Massaria theicola** Petch, Ann. Roy. Bot. Gard. Peradeniya III, Pt. I (1906) p. 3. — Peritheciis gregariis, in cortice omnino immersis, nigris, 0,25-0,3 mm. diam.; ascis anguste cylindraceis, 120-160 \times 20, octosporis; paraphysibus paucis, septatis; sporidiis oblique monostichis, hyalinis, continuis, deinde biseptatis, olivaceis, anguste ovatis, loculo medio saepe nigriore, in guttam expulsis, 17-22 \times 6-7.

Hab. in ramulis nigrificatis Theæ viridis, Ceylon.

6. **Massaria Xylostei** Hazsl. Sphær. Hung. pag. 174, t. XII, f. 49 4145

(1893). — Similis *M. Piri*; sporidiis (ex iconè) breviter fusoideis, brunneis, utrinque acutatis, strato mucoso hyalino crasso obvolutis, 4-nucleatis, nucleis extimis triangularibus, mediis transverse ellipsoideis, dein pseudo-4-loclaribus, loculis mediis angustioribus.

Hab. in ramis Lonicerae Xylostei in Hungaria.

7. **Massaria argentinensis** Speg. An. Mus. Nac. Buenos Aires t. XIX 4146 (1909) p. 380. — Peritheciis primo cortice tectis dein cum cortice secedentibus, lenticulari-subhemisphaericis, 250-350 μ . diam., minute ostiolato-pertusis; ascis cylindraceis brevissime pedicellatis, paraphysatis, 180-200 \times 18-22, octosporis; sporidiis 3-septatis 35-40 \times 14-18 pulchre fuligineis, primo mucoso-vestitis.

Hab. ad ramos putrescentes Oleæ europææ, Chacarita, Luhæ grandifloræ, Santa Catalina, Macluræ aurantiacæ, Marmol, Argentina Amer. austr.

8. **Massaria Fraxini** Hazsl. Sphær. Hung. (1893) pag. 174, t. XII, 4147 f. 49 e. — Peritheciis (non descriptis); sporidiis elongato-fusoideis, rectis, 5-septatis, 6-guttatis, non constrictis, utrinque acutis, brunneis, strato mucoso hyalino crasso obvolutis.

Hab. in cortice Fraxini in Hungaria.

9. **Massaria texana** Rehm, Ann. Mycol. V (1907) p. 517. — Peritheciis dispersis, cortice innatis, globosis, 0,3-0,4 mm. diam., ex cortice ibi denigrato protuberantibus, poro minutissimo pertusis; ascis cylindraceis, apice rotundatis, 100 \times 10, octosporis; sporidiis ellipsoideis, utrinque rotundatis, 3-septatis, haud constrictis, subfuscis, 12-14 \times 7-8, strato tenui mucoso obductis, 1-stichis, paraphysibus filiformibus, guttulatis, 1,5 μ . cr.

Hab. in cortice Quercus (Spanish), Texas Amer. bor. (LONG, ATKINSON). — *Massarice stipitata* affinis.

10. **Massaria platanioides** Rehm, Ann. Mycol. IV (1906) p. 336. — 4149 Peritheciis gregariis, cortice interiori haud mutato, subdealbato innatis, globulosis, 0,5-0,7 mm. diam., papillula semiglobosa, atra, corticem dealbatum perforantibus; ascis cylindraceis, c. 150 \times 15, octosporis; sporidiis oblongis utrinque rotundatis, 3-septatis, cellulæ massariæformiter ellipsoideis, interdum cellula una media iterum septata 5-cellularibus, fuscis, primitus cellulæ apicalibus subhyalinis, non perpendiculariter divisus, 22-25 \times 10-12, ad septa haud constrictis, strato tenui mucoso obvolutis, 1-stichis; paraphysibus filiformibus, teneris, septatis, guttulatis, 3 μ . cr.

Hab. in cortice trunci dejecti spec. indet., Lyndonville N. Y.

Amer. bor. — Affinis *Massariae Platani*, a qua sporidiis et peritheciis amplioribus recedit.

CLYPEOSPHÆRIA Fuck. — Syll. II p. 90, IX p. 798, XI p. 326, XIV p. 572, XVI p. 518, XVII p. 732.

1. **Clypeosphaeria myrticola** Spegazz., An. Mus. Nac. Buenos Aires 4150 t. XIX (1909) p. 381. — Peritheciis adnatis epidermide velatis, laxe gregariis, atris, nitidulis, e lenticulari subhemisphæricis 180-200 μ . diam.; ascis cylindraceis brevissime pedicellatis, paraphysatis, 110-120 \times 22-26, octosporis; sporidiis distichis ellipsoideis 3-septatis, ferrugineo-fuligineis, 30-32 \times 15-16.

Hab. ad ramulos vivos Eugeniacæ cujusdam in silvis prope Formosa Rep. Argentinæ Amer. austr. — Species notis nonnullis licheninis donata sed thallus adhuc omnino nullus visus.

2. **Clypeosphaeria chilensis** Speg., Fungi Chilenses (1910) p. 81. — 4151 Peritheciis cortice innatis, epidermide circa ostiolum minute nigriticata tectis, parvis lenticulari-subglobosis, subcarbonaceis, 180-350 μ . diam.; ascis e cylindraceo subclavulatis brevissime pedicellatis, dense paraphysatis, 120-150 \times 14-30; sporidiis mono- v. distichis, ellipsoideis, utrinque subacutiusculis, pulchre fuligineis, mediocribus, 3-septatis, non v. vix constrictulis, loculis nucleis lenticularibus v. semilunaribus præditis, 30-35 \times 10-14.

Hab. in ramis emortuis Eugeniacæ cujusdam in silvis prope Serro de Caracol de Concepcion Chile Amer. austr.

3. **Clypeosphaeria? theobromicola** Spegazz., Micromicetos de los Ca- 4152 caoyeros, Rev. Facult. Agronom. y Veter. La Plata t. II (1906) nn. 4-6, p. 305, fig. B. — Peritheciis laxiuscule inordinateque gregariis, cortice leniter sordideque dealbato v. pallescente innato-superficialibus, plus minusve nudis v. sæpe fere totis tenuiter velatis, superne modice hemisphærico-prominulis, mediocribus (0,50-1 mm. diam., 0,40-0,50 mm. altis), inferne applanatis, carbonaceis duris, rigidis, intus nucleo mucoso albido farctis; ascis cylindraceis, ante obtuse rotundatis postice cuneatis breviter crasseque pedicellatis 80-100 \times 10-15, paraphysisibus filiformibus densis subcoalescentibus obvallatis, 8-sporis; sporidiis sæpius oblique monostichis, ellipsoideis v. leniter navicularibus, utrinque obtusiusculis 18 \times 8, primo 6-blastis, serius 5-septatis, ad septa leniter constrictis, hyalinis.

Hab. in cortice Theobromæ Cacao, Bahia de Todos los

Santos Brasiliæ (HEMPEL). — Fungus lichenoides, *Pyrenula* pro-
ximus.

4. **Clypeosphaeria Asparagi** (Fuck.) Wint. — Syll. IX, pag. 798 — 4158
var. *montenegrina* Bubák, Bull. Herb. Boiss. 2 sér. VI (1906)
p. 403. — A typo differt sporidiis minoribus 15,5-17,5 \times 4-5, re-
ctis, raro curvulis.

Hab. in caulinis emortuis *Asparagi verticillati* prope
Rijeka Montenegro.

5. **Clypeosphaeria ? valparadisiensis** Spegazz. Fungi Chilenses (1910) 4154
pag. 81 cum icon. — Peritheciis gregariis saepius longitudinaliter
seriatis, epidermide stromatice nigrificata tectis, lenticularibus mi-
nutis coriacellis 150-200 μ . diam.; ascis subclavulatis breviter pe-
dicellatis dense paraphysatis, 110-130 \times 20; sporidiis distichis sub-
fusoideis non v. vix inaequilateralibus mediocribus 3-septato-con-
strictulis olivaceo-fuligineis, tunica mucosa tenui obvolutis, 34-
42 \times 9-12.

Hab. in culmis vetustis putrescentibus Chusqueæ Cumini-
gii Cerro Alegre de Valparaíso Chile Amer. austr.

6. **Clypeosphaeria minor** Starb., Ascom. Schw. Chaco-Cordill. Exp., 4155
Arkiy f. Bot. Bd. V (1905) pag. 25. — Peritheciis gregariis im-
mersis lenticulariter sphærioideis vertice applanato-convexulo, cum
cortice atrato concrecente, perpaullum illum elevantibus, centro
lenissime papillulatis demum poro minutissimo perforatis, atratis,
contextu carbonaceo, membranaceo, c. 200-250 μ . diam.; ascis
octosporis, late cylindraceis, sursum rotundatis, sessilibus, 100-125
 \times 24-25; sporidiis distichis, ellipsoideis vel ellipsoideo-oblongatis,
primo triseptatis, loculis uniguttulatis, deinde saepe quinque-septa-
tis, ad septa constrictulis, vetustis obsolete septatis, vix muco te-
nuissimo obvolutis, 28-32 \times 10-12; paraphysibus copiosissimis fili-
formibus, ramulosis, hyalinis.

Hab. in ramulis aridis pr. Laguna de la Brea, prov. Jujuy,
Argentina. — A *C. massariospora* Starb. peritheciis minoribus,
sporidiis majoribus plane differt.

7. **Clypeosphaeria splendens** Rick, Broteria V (1906) p. 48. — Pe- 4156
ritheciis 0,5 mm. latis, clypeo 1-2 mm., nigro, orbiculari, splen-
dente, ostiolo brevi; ascis 150 \times 13-15, tenuibus, apice incrassatis,
sporidiis cylindraceis, 26-32 \times 7, vix curvulis, constanter triseptatis,
initio hyalinis, dein chlorinis; paraphysibus hyalinis, dilutis, 2 μ .
latis, septatis, non ramosis.

Hab. in epidermide Bromeliaceæ cujusdam epiphytæ, Rio Grande do Sul Brasilie.

MELANOMMA Nits. et Fuck. — Syll. II p. 98, IX p. 801, XI p. 327, XIV p. 573, XVI p. 522, XVII p. 733.

1. **Melanomma suldense** Rehm, Ann. Mycol. V (1907) pag. 539. — 4157

Peritheciis dispersis, sessilibus, globosis, minutissime papillulatis, atris, glabris, ad basim hyphis nonnullis fuscis obsessis, carbonaceis, 400 μ . diam.; ascis cylindraceis, 90-100 \times 12, tetrasporis; sporidiis ellipsoideis, 3-septatis, cellula secunda latiore, utrinque subattenuatis, ad septa subconstrictis, rectis, quaque cellula guttam oleosam magnam includente, hyalinis, demum subfuscis, 21-25 \times 6-8, monostichis; paraphysibus filiformibus septatis, hyalinis, 4 μ . crassis.

Hab. ad caulem? Cerastii emortui inter moles glaciales supra Sulden, Örtler Tirolæ (Dr. REHM). — Proximæ species: *M. rubinum* Karst. sporidiis utrinque obtusis, curvulis, peritheciis erumpentibus differt; *M. Dryadis* Johans. peritheciis erumpentibus crustaceo-congestis, sporidiis haud guttatis diversa.

2. **Melanomma glaciale** Rehm, Oesterr. bot. Zeitschr. LVI (1906) 4158 pag. 294. — (Nomen nudum).

Hab. in caulibus Cerastii latifolii Alpeiner-Gletscher Stubaier, Austria.

3. **Melanomma Mate** Spegazz., An. Mus. Nac. Buenos Aires t. XVII 4159 (1908) p. 126. — Peritheciis hemisphaericis 75-100 μ . diam., plus minusve laxe gregariis, nigris, subcarbonaceis, basi tantum matrici insculptis, matrice sordide infuscata insidentibus; ascis clavulatis breviter pedicellatis 60 \times 8-10, paraphysatis; sporidiis ellipsoideo-subfusoideis, 3-septatis ad septa leniter constrictulis, loculis grosse 1-guttulatis, 12-15 \times 3-4, fuligineis.

Hab. in superficie interna truncorum cariosorum Ilicis paraguariensis in silva circa S. Pedro, Argentine Amer. austr.

4. **Melanomma Trevoæ** Speg., Fungi Chilenses (1910) p. 76. — Peritheciis in ligno denudato, laxe vel dense gregariis, insidentibus, globoso-depressis, minutis, glabris, atro-carbonaceis, vix papillato-ostiolatis 150-200 μ . diam.; ascis cylindraceis breviter pedicellatis densiuscule paraphysatis, 100 \times 6-8; sporidiis parvis elliptico-subclavulatis pallide fuligineis, 3-septatis, leniter constrictulis, loculo mediano supero sepius nonnihil crassiore, 14-15 \times 4-6.

Hab. in ramis emortuis *Trevoæ trinervis* in collibus San Bernardo prope Santiago, Chile, Amer. austr.

5. **Melanomma sordidissimum** Spegazz., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 384. — Peritheciis ligno latissime nigrificato insidentibus, dense constipatis saepe pseudostromate heterogeneo coniunctis, carbonaceis, 90-100 μ . diam.; ascis e cylindraceo subfuscoides brevissimeque pedicellatis 50 \times 10, octosporis, paraphysatis; sporidiis cylindraceo-ellipsoideis primo didymis serius 3-septato-constrictis, rectis vel leniter curvulis, 10-12 \times 5-5,5 obscure fuligineis.

Hab. ad ramos decorticatos emortuos *Eriobotryæ japonicae* in horto Santa Catalina prope Buenos Aires, Argentina Amer. austr.

6. **Melanomma Ceratoniæ** Roll. in Bull. Soc. Mycol. Fr. (1905) p. 24, tab. I, f. 2. — Peritheciis gregariis, carbonaceis, globosis, papillatis, 0,5 mm. latis e ligno erumpentibus; ascis oblongo-clavatis, pedicellatis, 130-140 \times 20-25, paraphysisbus exiguis obvallatis, octosporis; sporidiis distichis v. subtristichis, tereti-oblongis, utrinque leviter rotundato-attenuatis, curvulis raro rectis, crasse 8-septatis, ad septa præcipue medium constrictis, guttulatis, griseo-virentibus, dein brunneis, 30-32 \times 10.

Hab. in ligno vetusto *Ceratoniæ Siliquæ*, Can Carió in insulis Balearibus. — *Mel. Passerinii* et *M. nigrisepto* affine.

7. **Melanomma andinum** Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 383. — Maculis nullis; peritheciis primo tectis, dein denudatis sparsis v. pauci-aggregatis, carbonaceis, lenticulari-depressis, 150 μ . diam., vix papillulato-ostiolatis, subpruinulosis; ascis clavatis brevissime stipitatis, 100 \times 20, octosporis, pseudoparaphysatis; sporidiis e cylindraceo ellipsoideis, 3-septatis, 27-29 \times 10, fusco-fumosis.

Hab. ad ramos dejectos putrescentes *Bulnesia Rhamo* in andinis Upsallata, prope Merdoza, Argentina Amer. austr.

8. **Melanomma Sambuci** Earle, Bull. of the New York Bot. Gard. (1904) p. 291. — Peritheciis gregariis, saepe confertis, primum infossis sed mox erumpenti-superficialibus, nigris, globosis, rugosis, non collabescentibus, circ. 300-350 μ . diam.; ostiolo obscure papillato; ascis clavato-cylindraceis 90-110 \times 9-10; paraphysisbus copiosis, filiformibus; sporidiis monostichis, fuscis, anguste ellipsoideis vel anguste ovoides, 3-septatis, leniter constrictis, loculo medio saepe leniter inflato, 20-25 \times 7-8.

Hab. in ramis emortuis *Sambuci*, Snow Valley Peak, Ormsby Co. Nevada Amer. bor. (C. F. BAKER).

9. **Melanomma? præandinum** Spegazz., An. Mus. Nac. Buenos Aires 4165 t. XIX (1909) p. 384. — Peritheciis plus minusve seriatis confertis superficialibus ligno denudato rimulosoque insidentibus, atris, glabris, subglobosis, minutis; ascis subcylindraceis, breviter crassiusculeque pedicellatis 120-150 \approx 14-15, octosporis, paraphysatis; sporidiis elongato-subfusoideis 5-(rarius 7-) septatis, leptosphærioides, 40-50 \times 5-6, ad septa non v. vix constrictulis, loculo medio superiore incrassatulo primo chlorinis, serius pallide olivaceis.

Hab. ad caules aridos *Salviæ* Gilliesi in præandinis Chacheuta, prope Mendoza, Argentina Amer. austr.

10. **Melanomma cacheutense** Spegazz., An. Mus. Nac. Buenos Aires 4166 t. XIX (1909) p. 383. — Peritheciis superficialibus confertis subglobosis, 150-180 μ . diam., eximie minuteque papillato-ostiolatis, atris, glabris; ascis subclavulatis basi pedicello brevi gracili præditis, 100-120 \approx 16-18, paraphysatis, octosporis; spóridiis e cylindraceo subclavulatis, 5-septatis ad septa omnia constrictis, olivaceis, 26 \approx 8-10, rectis v. leviter curvulis, loculis centralibus sæpius minute 1-guttulatis.

Hab. ad ramos emortuos decorticatos *Baccharidis glutinosæ*, in alveo fluminis Mendoza prope Cacheuta Argentina Amer. austr.

11. **Melanomma chilense** Spegazz., Fungi Chilenses (1910) p. 75 cum 4167 icon. — Peritheciis superficialibus, hinc inde constipatis, globosis, subparvis, atris, glabris, opacis carbonaceis, vix papillato-ostiolatis, 350-500 μ . diam.; ascis subcylindraceis primo octosporis, serius sæpius tetrasporis, breviter, pedicellatis dense paraphysatis, 140-150 \times 20; sporidiis distichis fusoideis utrinque acute 5-septatis, loculo mediano supero doliformi maximo, fuligineis, majusculis, 20 \times 12-15.

Hab. in ramis emortuis *Proustiae pungentis* prope Batuco Chile Amer. austr.

12. **Melanomma fuscidulum** Sacc. — Syll. II, p. 99. — f. **populinum** 4168 Rehm, Ascom. exsicc. fasc. 37, n. 1665, Ann. Mycol. IV (1906) p. 408. — A typo differt peritheciis plerumque omnino liberis, rarius basi leviter adnatis.

Hab. in cortice *Populi* piramidalis emortuo prope Neufriedenheim Bavaria (RHEM).

13. **Melanomma Juniperi** Ellis et Everh. ap. Fairm. The Pyren. of 4169

Orleans County in Proc. Rochest. Acad. (1905) p. 190. — Peritheciis superficialibus basi leniter in ligno insidentibus, globosis, nigris, latis, sparsis v. quandoque lenissime confertis, ostiolo parvo prominulo submastoideo præditis; ascis cylindraceis, angustis; sporidiis fusoideis, brunneis, 3-5-septatis, duobus cellulis mediis inflatis, terminalibus angustioribus, 40 \times 10-12.

Hab. in ramis languidis Juniperi virginianæ, Lyndonville N. Y. Amer. bor. *

14. **Melanomma juniperincola** Rehm, Oesterr. botan. Zeitschr. LVI 4170 (1906) p. 293. — (Nomen nudum).

Hab. in ramulis Juniperi nanæ, Alpeiner-Alpe Stubai Austria.

15. **Melanomma anceps** v. Höhn. in Stb. k. Ak. d. Wissenschaft. Wien CXVIII, Abt. I (1909) p. 330. — Peritheciis superficialibus, sparsis, globosis, supra parum depresso-depressis, verrucoso-rugulosis, fragiliter subcarbonaceis, 600-700 μ . diam.; parietibus 80-180 μ . cr. nigro-violaceis, parenchymaticis; paraphysibus numerosis late filiformibus, mucosis; ascis tenuiter tunicatis, clavatis, utrinque sensim angustatis, octosporis, 110 \times 13; sporidiis distichis, elongatis, utrinque angustato-obtusis, rectis v. curvulis, tenuiter tunicatis, 30-36 \times 6-7,5 diu hyalinis et bilocularibus, demum pallide violaceis et quadrilocularibus, ad septa non constrictis, loculis mediis angustioribus.

Hab. in caulibus putrescentibus Monocotyledoneæ cujusdam, Buitenzorg in ins. Java.

16. **Melanomma epiphytica** Raciborski, Bull. Ac. Sc. Cracovie (1909) 4172 p. 387. — Hypothallo 1-3 cm. lato, crasso, nigro-carbonaceo, arcte adnato, pilis simplicibus septatis brevibus nigris horizontaliter patentibus dense tecto; peritheciis in centro plagularum plerumque evolutis, hemisphaericis, parietibus crassis validis et superficie inaequali præditis, nigro-carbonaceis, fragilibus, apice depresso ostiolatis, intus mucosis; paraphysibus filiformibus numerosissimis; ascis elongato-cylindraceis 320-380 \times 25-29, crasse tunicatis, octosporis; sporidiis monostichis, 60-80 \times 19-22, levibus, brunneis, medio constrictulis, elongato-ovoideis, quadrilocularibus, raro 2-3-loocularibus.

Hab. in culmis ramulisque vivis Bambusarum frequens prope Buitenzorg in ins. Java.

17. **Melanomma glumarum** I. Miyake, Pilze Reispfl. Japan in Journ. 4173 Colleg. Agricult. Tokyo, II (1910) pag. 242, t. XIII, f. 1-8. — Peritheciis in pagina super. glumarum sparsis, globosis v. ellip-

soideis, nigris, ostiolatis, 150 μ . circ. diam.; ascis cylindraceis breviter pedicellatis, plerumque curvulis, 70-90 \times 10, octosporis; sporidiis distichis, fusoideis, plerumque incurvatis, obscuris, 24-30 \times 4-5, triseptatis, 1-2 guttulatis; paraphysibus non visis.

Hab. in glumis *Oryzae sativæ*, Soochou Sinarum (I. M. YAKE).

- 18 **Melanomma Xylariæ** v. Höhnel, Ergeb. Bot. Exp. Südbras. 1901, 4174 Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 24.
— Peritheciis superficialibus in greges rotundatos 0,5-1,5 mm. latos arcte confertis, globosis v. obconoideis, sæpe subtympaniformibus, supra nitidulis, plerumque depresso et umbilicatis, basi rugulosis, opacis, coriace-carbonaceis, demum sæpe collabescitibus 350-450 μ . diam.; ascis octosporis, clavatis, breviter pedicellatis, 100-120 \times 12-14; paraphysibus numerosis, filiformibus, ascis superantibus, mucosis; sporidiis plerumque distichis, quadrilocularibus, fusoideis, utrinque angustatis, obtuse rotundatis, loculo medio brunneo, loculis terminalibus subhyalinis, septo medio plerumque subangustatis, 28-40 \times 5-6.

Hab. parasitice in *Xylaria polymorpha*, Alto da Serra Sao Paulo Brasiliae. — *Mel. anglico* (PLOWR) affinis species.

TREMATOSPHÆRIA Fuck. — Syll. II p. 115, IX p. 811, XI p. 329, XIV p. 575, XVI p. 524, XVII p. 734.

1. **Trematosphæria euganea** Gaia, Flor. micol. prov. Padova, p. 21 4175 (sunto litogr.). — Peritheciis solitariis, rarius 2-3 proximatis, nigris, carbonaceis, sphæricis, tenaciter putamini infixis et basi vix subimmersis, 700-900 μ . diam., ostio mediocriter papillato, cylindraceo, crasso, ad apicem conice sæpe obtruncato atque pertuso; ascis clavatis, breviter stipitatis, 190-210 μ . longis; paraphysibus filiformibus guttulatis; sporidiis irregulariter distichis, curvulis, fulvo-fuscis, 7-septatis, raro 6-5-septatis, ad apicem aliquantulum attenuatis et pallidioribus, 48-52 \times 11-12.

Hab. in putamine Persicæ vulgaris, Cattajo prope Battaglia, in Euganeis Ital. boreal. — Accedit ad *Trematosphæriam callispermam*, a qua differt præcipue longitudine ascorum et sporidiorum, et peritheciis vix subimmersis.

2. **Trematosphæria Virginis** Rehm, Ann. Mycol. V (1907) p. 540. — 4176 Peritheciis in ligno decorticato late denigrato subgregariis, globoso-conoideis, lata basi sessilibus, plerumque papillulatis, poro minutissimo pertusis, atris, glabris, carbonaceis, 0,7-1 mm. diam.; ascis

cylindraceis, apice rotundatis, 150 \times 15-17, octosporis; sporidiis ellipsoideis, subobtusis, rectis, hyalinis, demum dilute flavidulis, 3-septatis (an demum 5-septatis?) 21-25 \times 8-9, monostichis; paraphysibus filiformibus, hyalinis.

Hab. ad caules siccos Dryadis octopetalæ, juxta glaciem Eiger Virginis Helvetiae (Dr. REHM). — Peritheciis amplis facile dignoscenda; a *T. Henriquesiano* sporidiis minoribus recedit.

3. **Trematosphæria hypoxylonoides** Rehm, Ann. Mycol. V (1907) p. 540. 4177
Peritheciis gregariis interdum 2-3 arce consociatis, globulosis, sessilibus, parte dimidia inferiore cortici immersa, superiore hemisphaerica in papillulam brevissimam, poro conspicuo pertusam elongata, nigris, nitentibus, glabris, 1-1,5 mm. diam., carbonaceis; ascis cylindraceo-clavatis, apice rotundatis, 150-180 \times 12-15, octosporis; sporidiis fusiformibus, haud acutis, rectis, 7-septatis, ad septa, imprimis medium, subconstrictis, cellula quarta longe cæteris majore, cellula tertia et quarta guttam oleosam magnam includente, subfuscis, 30-33 \times 8-10, distichis; paraphysibus filiformibus.

Hab. ad corticem Tiliæ in Lusatia sup. (FEURICH).

4. **Trematosphæria Palaquii** Ricker, A List Philipp. Fungi, in Philipp. Journ. of Science, I Suppl., (IV 1906) p. 281. — *Peritheciis gregariis v. sparsis, leniter immersis, subcarbonaceis, nigris, ovato-globosis, 1-2 mm. diam., ostiolo plerumque obtuse conoideo, mox deciduo; paraphysibus filiformibus, numerosis, asco longioribus; ascis clavatis v. cylindraceis, 5-sporis, 132-141 \times 14-15; sporidiis monostichis, ovato-oblongis primum hyalinis dein brunnescentibus, 3-septatis, non constrictis, 17-20 \times 8-12.* 4178

Hab. in cortice Palaquii latifolii, Luzon Prov. Parac in ins. Philippin. (MERRILL).

5. **Trematosphæria Erythrææ** P. Henn., Hedwigia XLVII (1908) 4179 p. 268 (nec *T. Erythrææ* P. Henn. l. c. pro errore). — *Peritheciis sparsis v. subgregariis, innato-superficialibus, atro-subcarbonaceis, subhemisphaericis, ostiolatis, centro depressis, c. 300 μ . diam.; ascis clavatis, obtusis, 8-sporis, 60-70 \times 8-10, paraphysibus filiformibus c. 2 μ . crassis; sporidiis subdistichis oblongo-fusoideis utrinque subacutis, 6-7-septatis, fusco-brunneis, 26-32 \times 3 $\frac{1}{2}$ -4.*

Hab. in pedunculis Erythrææ ramosissimæ, Rio de Janeiro, Serra do Itatiaia, Brasilia.

6. **Trematosphæria socialis** Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) p. 53. — *Peritheciis gregariis in ligno nigrefacto* 4180

immersis, ostiolo acuto brevi prominentibus, compactis, nigris, majusculis; ascis elongato-clavatis in pedicellum elongatis, 150-180 \times 12-16, octosporis; sporidiis recte polystichis, obscure brunneis, 4-6-locularibus, parum constrictis, cellula terminali pallidiori, anguste subfusoideis, 34-45 \times 6-8; paraphysibus numerosis, filiformibus, hyalinis.

Hab. in ligno *Alni* putrescente, Semlin prope Rathenow, Germania.

7. *Trematosphæria tripartita* Kirschst., Verh. Bot. Ver. Brandenburg. XLVIII (1906) p. 53. — Peritheciis sparse gregariis in ligno nudulantibus, ostiolo brevi crasso prominentibus, minutis, tenui-membranaceis; excipulo brunneo, parenchymatico; ascis clavatis v. subcylindraceis, supra rotundatis, crasse tunicatis, sessilibus vel brevissime crasseque pedicellatis, octosporis, 60-70 \times 10-12; sporidiis oblique v. recte distichis, cylindraceis, utrinque rotundatis, rectis, trilocularibus, primum flavis dein pulchre castaneo-brunneis, ad septa constrictulis, 14-18 \times 4-6; paraphysibus crassiusculis, filiformibus, conglutinatis.

Hab. in ligno salicino decorticato, Gross-Behnitzer See Germania.

8. *Trematosphæria pallidispora* Kirschst., Verh. Bot. Ver. Brandenburg. XLVIII (1906) p. 53. — Peritheciis sparse gregariis, immersis, dein plus minusve prominentibus, parvis, coriaceis, breviter crasse papillatis, nigris, lignum rubro colorantibus; ascis anguste clavatis, supra rotundatis, breviter pedicellatis, octosporis, 120-150 \times 15-18; sporidiis irregulariter pluriseriatis, hyalinis, maturis flavidis, fusoideis, utrinque rotundatis, rectis v. curvulis, 10-locularibus, ad septa fortiter constrictis, loculis uni-v. pluriguttulatis, 30-40 \times 6-7; paraphysibus numerosis, filiformibus, septatis, hyalinis.

Hab. in ramis saliciniis decorticatis putrescentibus, prope Rathenow Germania.

9. *Trematosphæria bambusicola* Rick, Broteria V (1906) p. 47. — 4183
— Peritheciis primitus immersis, cute nigrefacta, dein ad dimidiam partem prorumpentibus, scissura longitudinali $\frac{3}{4}$ mm. diam., atris, ostiolo brevi, obtuso; ascis 100-130 \times 5-6, pedicellatis, sporidiis fusiformibus 3-4-locularibus, subhyalinis, in septis valde constrictis, 20 \times 4-5, subcurvulis; paraphysibus filiformibus, ascum longe superantibus.

Hab. in culmis siccis *Bambusæ*, Rio Grande do Sul Brasiliæ.

10. *Trematosphæria ephemera* Rehm apud Hazsl. Sphær. Hung. 4184

(1893) p. 69, t. IV f. 15. — Peritheciis superficialibus, gregariis hemisphaerico-conoideis, ostiolo longiusculo, nigris; ascis clavatis apice rotundatis, brevissime stipitatis octosporis; sporidiis irregulariter distichis, 3-septatis, non constrictis oblongo-fusoideis, utrinque acutiusculis, hyalinis, 26-28 \approx 7, rectis.

Hab. in culmis emortuis Zeæ Maydis in Hungaria (LOJKA).
— Vix hujus generis.

TREMATOSPHÆRELLA Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) pag. 54. (Etym. a *Trematosphæria*, cuius est analoga). — Perithecia innato-erumpentia, parva, nigra, coriaceo-membranacea, breviter ostiolata. Asci late clavati, fere ovoidei, octospori, a paraphysati. Sporidia fusoides, plurilocularia, colorata. — A *Trematosphæria*, cui affinis differt peritheciis submembranaceis, paraphysis nullis.

1. **Trematosphærella fuscispora** Kirschst. l. c. p. 54, cum icon. — 4185
Peritheciis gregariis ligno innatis, nigris, coriacellis, basi hyphis brunneis paucis ornatis, subglobosis, 200-300 μ . diam., ostiolo prominentibus v. superficialibus; ascis late clavatis, vix pedicellatis, supra rotundatis, octosporis, 40-56 \approx 12-16; sporidiis irregulariter fusoides, utrinque rotundatis, irregulariter dispositis, griseo-brunneis, quadrilocularibus, loculo secundo plerumque crassiori, 14-20 \approx 4-5.

Hab. in ligno pineo putri in silvis prope Rathenow Brandenb. Germaniae.

TRICHOHLERIA Sacc., Ann. Mycol. VI (1908) p. 559. (Etym. *thrix trichos* pilus et *Ohleria*, h. e. *Ohleria pilosa*). — Perithecia superficialia, globoso-conoidea, membranaceo-molliuscula, pilis v. setis vestita, nigricantia, ostiolo praedita. Asci elongati, paraphysati, octospori. Sporidia oblonga, v. fusoides, 3-septata, colorata, mox medio secedentia et semisporas 16 biloculares formantia. — Ab *Ohleria* recedit tantum villo et mollitie peritheciorum.

1. **Trichohleria quadrigellensis** Flag. et Sacc. in Sacc. Ann. Myc. VI (1908) pag. 559, tab. XXIV, f. 2. — Peritheciis laxe gregariis, globosis v. globoso-conoideis obtuse papillatis, 300 μ . diam., nigris, ubique pilosis; contextu celluloso, dilute olivaceo-fuligineo, ex cellulis globoso-angulosis 10-12 μ . diam. formato, molliusculo; pilis peritheciis densiusculis, filiformibus, tortuosis, fuligineis septatis, 80-100 \approx 3-4; ascis tereti-clavatis, filiformi-paraphysatis, apice ob-

tusulis, sensim longe tenuato-stipitatis, 70-80 \approx 5,5-6,5, octosporis; sporidiis fusoideis, distichis, rectiusculis, 20 \approx 3, mox in articulos (16) conoideoes biloculares dilabentibus, olivaceo-fuscis.

Hab. in ramis fagineis decorticatis putrescentibus, Rigny sur Arroux, Gallia (FLAGOLET). — Ob contextum molliusculum ad Hypocreaceas vergit. « Quadrigellensis » dicimus ex Quadrigellis h. e. Charolles, territorium in quo reperta est species.

CARYOSPORA De Not. — Syll. II p. 122, IX p. 815, XI p. 329.

1. **Caryospora cariosa** Fairman, The Pyren. of Orleans County in 4187 Proceed. Rochest. Acad. (1905) p 190 cum fig. 1-6. — Peritheciis majusculis, conicis, nigris, superficialibus v. basi ligno leniter immersis, sparsis vel gregariis; ostiolis parvis; ascis 4-8-sporis, oblongo-cylindraceis, p. sp. 150 \approx 20, paraphysibus filiformibus numerosis obsitis; sporidiis recte monostichis, primum hyalinis dein brunneis demumque fere opacis, uniseptatis, raro versus apicem etiam septatis ideoque 3-septatis, granuloso-guttulatis, septo medio constrictis, e fusoideo biconoideis, apice subobtusis, 36-43 \approx 13-17.

Hab. in ligno fagineo carioso, Lyndonville N. Y. Amer. bor.

CHÆTOSPHÆRIA Tul. — Syll. II p. 92, IX p. 799, XI p. 326, XIV p. 572, XVI p. 521, XVII p. 736.

1. **Chætosphaeria ludens** Morg., Journ. of Myc. XI (1905) p. 105. — 4188 Peritheciis globosis simpliciter pertusis c. 0,4-0,5 mm. diam., setulis longis, 150-200 μ ., pallide brunneis vestitis, gregariis, crusta tenui brunnea v. nigra insidentibus, subfibrillosis; ascis tetrasporis paraphysatis, longe pedicellatis, 130-150 \approx 8-9; sporidiis ellipsoideo-oblongis, leniter inaequilateralibus, utrinque obtusis, primum hyalinis et simplicibus dein brunneis et 1-3-septatis, 17-20 \approx 7-8.

Hab. in ligno vetusto Aceris sp. in America bor. — A *Ch. pannicola* (B. et C.) ascis et sporidiis distincta.

2. **Chætosphaeria cælestina** v. Höhn., Stzb. k. Ak. d. Wiss. Wien 4189 CXVIII, Abt. I (1908) p. 324, cum icon. — Subiculo parce evo luto; hyphis erectis, diaphane brunneis, septatis, rigidulis, 130-160 \approx 5-6, apice in capitula 8-10 μ . diam. inflatis, basi bulbosis 12-20 μ . diam.; inspersis conidiis 6-cellularibus, brunneis, cellulis extimis obtusis, minutis, hyalinis, 40-48 \approx 8-12, non constrictis; peritheciis pro more binatis, ovoido-globosis, non collabescientibus, 340-360 μ . diam., 380 μ . alt., carbonaceis, fragilibus, crasse papillatis, vertice calvis, ceterum setulis laxis, rigidis, saepe sursum cur-

vis septatis, 140-180 \times 5-6, prope medium apiceque elliptico-inflatis; ascis clavatis, paraphysibus diffluentibus obvallatis, octosporis, 170-210 \times 16-18; sporidiis subdistichis tereti-fusoideis, curvulis, utrinque obtuse rotundatis, 6-cellularibus, 36-44 \times 7-8, non constrictis, brunneis, cellulis extimis minoribus hyalinis.

Hab. in ligno indurato arboris ignotæ in horto bot. Buitenzorg ins. Java. — Conidia verisimiliter cum statu ascophoro metagene-

tice connexa.

3. *Chætosphæria elegans* Rick, Broteria V (1906) p. 45. — Perithe. 4190 ciis subglobosis $\frac{3}{4}$ mm. diam., gregariis, atris, subiculo carbonaceo, brunneo, multiramoso-stellato insidentibus, pilis rigidis, atris, longis, a subiculo distinctis, usque ad ostiola obtectis, collabescen-

tibus; ascis clavatis 100 \times 10, apice incrassato, breviter pedicellatis; sporidiis cylindraceis, 10-14 \times 5-6, 3-septatis, septo crasso, vix coarctato, cellulis ultimis hyalinis, ceteris brunneis, omnibus grosse guttulatis; paraphysibus dilutioribus.

Hab. in ligno putrido, Rio Grande do Sul Brasiliæ. — *Acan-*

thostigmati proxima sed sporidia et subicum *Chætosphæriæ*.

SPORORMIA De Not. — Syll. II p. 123, IX p. 816, XI p. 329, XIV p. 577, XIV p. 526, XVII p. 737.

1. *Sporormia lata* Griffiths, Mem. Torr. Bot. Cl. XI (1901) p. 110, 4191 t. XVI, f. 10-12. — Peritheciis sparsis, hyphis rhizoideis arcte adnatis; e subgloboso ovatis 600 \times 375; e membranaceo coriaceis, nigris et opacis, apice subrostellatis; ascis octosporis, cylindraceis, supra rotundatis infra in stipitem brevem crassiusculum angustatis, 260-320 \times 30-35; paraphysibus filiformibus, septatis, copiose ramosis ascis subsuperantibus; sporidiis monostichis, ex ovoideo late cylindraceis, utrinque rotundatis, 45-48 \times 16-18, quadricellularibus, profunde constrictis sed non secedentibus, brunneis, strato mucoso lato in aqua diffluente obductis.

Hab. in stercore Cuniculorum, Decorah Iowa Amer. bor.

2. *Sporormia vexans* Auersw. — Syll. II, p. 129 — var. *australis* 4192 Starb., Ascom. Schwed. Chaco-Cordill. Exp. Arkiv f. Botan. V (1905) p. 16. — A typo satis dignoscitur: ascis 127-150 \times 19-20; sporidiis 45-47 \times 9-10, loculo terminali superiore fere sphærioideo, minute mucronatulo, 7,5 μ . diam., terminali inferiore conico, 10 \times 6; tertio superiore latiore 7,5 \times 10.

Hab. in fimo, prov. Jujuy, Moreno Argentinæ, 3500 m. s. m.

3. *Sporormia leguminosa* Fairm., Proc. Rochester Acad. of Sc. IV 4198

(1906) p. 216, tab. XXI, fig. 1-5. — Peritheciis gregariis, pustulato-prominentibus, apice ostiolo subacuto v. subcompresso aperitis; ascis clavato-cylindraceis, paraphysibus filiformibus numerosis obvallatis, 140-150 \times 15-16; sporidiis brunneis juvenilibus maculis longitudinalibus coloratis demum omnino opacis, quadrilocularibus, irregulariter distichis, rectis v. curvulis, strato mucoso circumdatis, 43-47 \times 10, loculis terminalibus 13 μ . long. mediis 10 μ . long.

Hab. in superficie interna leguminum Robiniæ Pseudacaciae, Lyndonville N. Y. Amer. bor.

GIBBERIDEA Fuck. — Syll. II p. 132, IX p. 820, XVI p. 1136, XVII p. 739.

1. **Gibberidea Bresadolæ** Rick, Fungi austro-amer. V, n. VI, Ann. 4194 Myc. V (1907) p. 31. — Peritheciis in maculis folii solitariis v. parce congregatis, atris, rugulosis, 1-2 mm. latis; ascis clavatis 100-150 \times 10-14; sporidiis fusoideis plerumque utrinque appendiculatis, 30-70 \times 7-10, quadrilocularibus, fuscidulis, nucleatis, pluriserialibus; paraphysibus linearibus sæpe dilutioribus.

Hab. in foliis Cupaniæ sp. in Brasilia Amer. austr.

2. **Gibberidea adesmcola** Speg., An. Mus. Nac. Buenos Aires t. XIX 4195 (1909) p. 365. — Peritheciis dense constipatis per corticis fissuras protrudentibus, subglobosis, 160-250 μ . diam., obsolete umbilicatis nitidulis; ascis cylindraceis brevissime cuneato-pedicellatis, 100-200 \times 12-18, dense paraphysatis, octosporis; sporidiis subellipsoideis v. obsolete subclavulatis 22-26 \times 9-11, 3-septatis, ad septum medium constrictulis, fumosis.

Hab. ad ramos emortuos Adesmiarum specierum plurimorum lignosarum, Cacheuta, Uspallata et Puente del Juca, prope Mendoza, Argentina Amer. austr.

3. **Gibberidea turfosa** Syd., Mycoh. germ. fasc. XIV-XV n. 690 (1908), 4196 et in Ann. Mycol. VI (1908) pag. 479. — Peritheciis plerumque cæpitoisis 2-5 dense congestis, raro tantum solitariis, primo peridermio tectis, dein erumpentibus, tandem subsuperficialibus, stromate non vel vix evoluto, globosis, carbonaceis, atris, ostiolo minuto papilliformi, 300-450 μ . diam.; ascis longe cylindraceis, apice obtusis, breviter stipitatis, 85-115 \times 7-9, octosporis; paraphysibus numerosis, filiformibus, ascos superantibus; sporidiis monostichis, ovato-oblongis, utrinque obtusis, 3-septatis, ad septa lenissime constrictis, olivaceo-brunneis, 14-18 \times 4 $\frac{1}{2}$ -7.

Hab. in ramis emortuis Vaccinii uliginosi, Rotes Moor

pr. Gersfeld Rhöngebirge Thuringiae. — *Melanomma Lenarsii* in Calluna, convenient sporidiis 12-17 \approx 3,5-5, sed ejus perithecia *Melanommatis* genuini.

4. **Gibberidea Artemisiæ** Earle, Bull. of the New York Bot. Gard. 4197 (1904) p. 291. — Stromatibus brunneis angustis; peritheciis gregariis, 2-3 v. 6-8 in quoque stromate v. quandoque sparsis, subglobosis, demum leniter depresso, obscure fuscis, subnigris, nitidulis, circ. 500 μ . diam., ostiolo minute papillato; ascis cylindraceis 100-120 \approx 8-10; paraphysibus filiformibus; sporidiis subdistichis, cylindraceis, coloratis v. pallide fuligineis, 3-septatis, constrictis, curvis, 20-25 \approx 7.

Hab. in caulibus Artemisiæ tridentatae, King's Canon prope Carson Nevada Amer. bor. (C. F. BAKER).

5. **Gibberidea alnicola** Rehm, Ann. Mycol. V (1907) p. 540. — Pe. 4198 ritheciis sub cortice nidulantibus 4-12 arce congregatis per rimas longitudinales corticis prorumpentibus demum fere sessilibus, globosis, minute papillatis glabris, atris, poro conspicuo pertusis contextu parenchymatico, 0,3-0,4 mm. diam.; ascis cylindraceis, 90-100 \approx 8-9, octosporis; sporidiis subolavulatis, utrinque obtusis, rectis, 3-septatis, vix ad septa constrictis, cinereo-flavidulis, 12-15 \approx 4,5-5 monostichis, paraphysibus filiformibus 1 μ . crassis.

Hab. ad ramulum Alni viridis, Fürstenalp, Graubünden, Helvetia. (Dr. VOLKART).

7. **Gibberidea Zingiberacearum** Raciborski, Bull. Ac. Sc. Cracovie 4199 (1909) p. 385. — Stromatibus subepidermicis parvis, extus nigro-carbonaceis intus albis, irregulariter rotundatis; peritheciis globo-ovoideis, quandoque forma irregularibus, levibus, nigris, ostiolo punctiformi epapillato praeditis, primum stromate immersis, demum pro parte prominentibus, 110-130 μ . latis, 110-170 μ . long.; paraphysibus 2 μ . cr., septatis, hyalinis, cylindraceis; ascis breviter clavatis 75-80 \approx 8-10, octosporis, apice rotundatis, basim versus angustatis; sporidiis fusoideis, primum bi-dein in eodem asco quadrilocularibus, medio constrictulis, utrinque lanciformi angustatis, rectis v. curvulis, levibus, pallide brunneis, 15-18 \approx 3,5.

Hab. initio plerumque parasitice in uredosoris ad folia Amomi dealbati, Zingiberis sp., Alpiniae, Curcumæ longæ, prope Buitenzorg Java.

8. **Gibberidea Nipæ** P. Henn., Hedwigia XLVII (1908) p. 257. — 4200 Peritheciis superficialibus, liberis cæspitosis in stromate atro-crustaceo effuso dispositis, atro-carbonaceis, ovoideis, conico-ostiolatis

dein perforatis; ascis clavatis, vertice obtuso-rotundatis, 8-sporis, 90-110 \times 20; sporidiis subdistichis, oblonge fusoideis, utrinque obtusiusculis, 4-5-septatis, brunneis, 40-48 \times 8-10.

Hab. in petiolis emortuis Nipæ fruticantis, Luzon, Prov. Pampanga, San Esteban, Ins. Philippin (MERRILL).

GILLOTIA Sacc. et Trott. (Etym. a cl. Doct. F. X. GILLOT, gallico, [1842-1910] mycologo et botanico egregio, præcipue de fungis superioribus apprime merito). — A genere *Diplothecea* dignoscitur sporidiis tantum transverse 3-septatis nec muriformibus, demum olivaceo-brunneis et muco, ut videtur, non inclusis.

1. **Gillotia orbicularis** (Syd.) Sacc. et Trott., *Diplothecea?* *orbicularis* 4201
Syd., Ann. Mycol. V (1907) p. 357. — Peritheciis in greges ple-
rumque orbiculares 3-10 mm. diam. dense confertis et plagulas
atras efformantibus, atris, erumpentibus, superficialibus, subglobo-
sis, rugulosis, ca. 100-125 μ . diam.; ascis saccatis vel subclava-
tis membrana valde incrassata, aparaphysatis, 60-85 \times 20-30 bre-
vissime stipitatis, octosporis; sporidiis conglobatis, oblongis, 3-
septatis, rectis vel leniter curvulis, primo hyalinis, tandem oliva-
ceo-brunneis, 28-38 \times 8-11.

Hab. in cortice Cactaceæ, Campinas Prov. Sao Paulo Bra-
siliæ.

Sect. 8. Hyalodictyæ.

PLEOSPHÆRULINA Pass. — Syll. XI p. 350, XIV p. 611, XVI
p. 554, XVII p. 743.

1. **Pleosphaerulina Briosiana** Pollacci - Syll. XVI p. 554 - var. **bra-4202**
siliensis Puttem. in Revista Agricola S. Paulo (1905) p. 17-20,
fig. 13-15 extr. — Peritheciis innatis vix erumpentibus, ostiolo
latiusculo obtuso præditis, 120-150 μ . diam.; ascis paucis ellipso-
deis, sessilibus, utrinque obtusis, 80-90 \times 30-38, octosporis, apa-
raphysatis; sporidiis subtristichis, ovato-oblongis utrinque obtusulis,
triseptato-muriformibus, ad septa leviter constrictis, 25-30 \times 10-12,
e hyalino chlorinis.

Hab. in foliis Medicaginis sativæ, quam vexat, S. Paulo
Brasiliæ.

2. **Pleosphaerulina argentinensis** Speg. An. Mus. Nac. Buenos Aires 4203
t. XIX (1909) p. 387. — Maculis albescentibus orbicularibus vel

biformibus disseminatis; peritheciis amphigenis solitariis vel laxe gregariis innatis coriacellis, e lenticulari subglobosis 100-120 μ . diam., ostiolo majusculo impresso perforatis; ascis ovoideis subsessilibus 80-90 \times 40-45, octosporis, a paraphysatis; sporidiis subellipsoideis 3-5-septato-muriformibus, ad septa leniter ad medium validius constrictis, 30-35 \times 12-16, hyalinis.

Hab. ad folia languida Daturæ Stramonii, Marmol prope Buenos Aires Rep. Argentina Amer. austr. — *Catharinice americanae* (Ell. et Ev.) Sacc. Syll. XI p. 350 affinis, notis plurimis tamen distincta.

3. **Pleosphaerulina smilacicola** Speg., An. Mus. Nac. Buenos Aires 4204 t. XIX (1909) p. 387. — Maculis saepius marginalibus amphigenis e cinerescente albido-arescentibus determinatis, areola angusta sordide subpurpurascente cinctis; peritheciis subsolitariis erumpenti-subsuperficialibus, sublenticularibus 100-150 μ . diam., atris, glabris, ostiolo minuto impresso pertusis; ascis subpiriformibus 70 \times 50, basi perminute papillato-pedicellatis, octosporis, a paraphysatis; sporidiis ellipsoideo-oblanceolatis 5-septato-muriformibus, 35-40 \times 10-14, tunica mucosa crassa concolore vestitis, hyalinis.

Hab. ad folia languida Smilacis campestris in dumetis prope Jujuy Argentina, Amer. austr.

4. **Pleosphaerulina Oryzæ** I. Miyake Pilze Reispfl. Japan (Journ. Collège Agricul. Tokyo II (1910) pag. 250, t. XIII, f. 23-25. — Peritheciis immersis, globosis v. ellipsoideis, nigris, crasse pseudoparenchymaticis 100-125 μ . diam.; ascis ovoideis, octosporis, 50-60 \times 30-35; sporidiis hyalinis transverse 4-5-septatis et 1-9 septis longitudinalis præditis, 25-32 \times 9-12.

Hab. in foliis albescentibus Oryzæ sativæ, Ehime, Japonia.

5. **Pleosphaerulina Phragmitis** Rehm, Ann. Mycol. V (1907) p. 542 4206 — Peritheciis gregariis innatis globosis papilla minutissima prominente, atris, contextu membranaceo fusco, 0,3 mm. diam., demum plus minusve denudatis, sessilibus; ascis crasse tunicatis, clavatis vel piriformiter versus basim dilatatis, sessilibus, 150 \times 50-70, octosporis; sporidiis ovoideo-ellipsoideis, utrinque obtusis, primitus 3-, dein transverse 5-septatis, cellulis excl. terminalibus, semel longitudinaliter divisis, medio subangustatis, hyalinis, quaque cellula grosse 1-guttata, 40-45 \times 20, distichis; paraphysibus rarissimis, septatis, 5 μ . crassis, hyalinis.

Hab. ad culmos putridos Phragmitis communis in lacu Staffelsee prope Murnau alpium Bavariae (REHM).

CATHARINIA Sacc. — Syll. II p. 275, IX p. 892, XI p. 350, XIV p. 611, XVI p. 554, XVII p. 743.

1. **Catharinia chilensis** Speg., Fungi Chilenses (1910) p. 84 cum ic. 4207
— Peritheciis sparsis subglobosis parvis ligno denudato plus minusve insculptis, subcarbonaceis, 250-400 μ . diam.; ascis clavulatis, deorsum modice tenuiterque attenuato-pedicellatis, paraphysatis, 160-180 \times 18-20; sporidiis submonostichis ellipsoideis saepius leniter subnavicularibus, transverse 3-5-, longitudinaliter 1-septatis. parvis, hyalinis, 16-20 \times 7-9.

Hab. in ramis siccis corrosionis Lithrææ causticæ Cerro Alegre de Valparaiso Chile Amer. austr.

2. **Catharinia tetraspora** v. Höhn. Fragm. Mykol. IX, in Sitzb. k. Ak. 4208 d. Wiss. Wien CXVIII (1909) Abt. I, pag. 1505. — Peritheciis carbonaceo-fragilibus, gregariis, contextu crassiusculo præditis, e globoso ventricoso-conoideis, glabris, levibus, 300 μ . circa latis, epidermide tectis dein erumpenti-superficialibus; paraphysibus numerosis, filiformibus, ramosis, 1 μ . cr., fortiter mucosis; ascis tenuiter tunicatis, clavatis, supra rotundatis, basi sensim in pedicellum modice longum crassum angustatis, plerumque tetrasporis, 80-120 \times 14-17; sporidiis plerumque monostichis, raro distichis et tunc ascis brevioribus et crassioribus, hyalinis, 3-6-plerumque 5-septatis et interrupte longitudinaliter 1-septatis, ad septa non constrictis, subfusoideis, 21-32 \times 7-12, plerumque 24-28 \times 10-12, tenuiter tunicatis.

Hab. ad culmos emortuos Bambusæ, in Horto bot. Buitenzorg in ins. Java.

3. **Catharinia Rostrupii** Berl. Icon. Fung. II, p. 100, t. 135, f. 2. — 4209 Peritheciis sparsis, globosis, ostiolo crassiusculo donatis, tectis, dein utramque folii paginam inflantibus, $1/2$ mm. diam., atris; ascis 140-160 \times 35-42; sporidiis oblongo-ovoideis, utrinque obtusulis, subinde inaequilateris, transverse triseptatis, 40-45 \times 16, hyalinis, muco obvolutis, transverse 3-septatis, loculis mediis 1-2 septis longitud. divisis.

Hab. in foliis Poæ in Greenlandia (ROSTRUP in herb., sub *Metasphearia neglecta* [non Niess!]).

4. **Catharinia Pazschkeana** Rehm, Ann. Mycol. V (1907) p. 528. — 4210 Peritheciis in maculis hypophyllis irregularibus, cinereo-viridulis, interdum albidulis, ex epidermide folii decolorata formatis, 0,5-1,5 cm. diam. dispersis, interdum gregariis, sub epidermide nidulatis ab eaque obtectis, globulosis, papillula minutissima promi-

nente, demum denudatis, atris, poro pertusis, subcarbonaceis, 400-500 μ . diam., senilibus scabris, fere sessilibus; ascis clavatis, crasse tunicatis, 100-110 \times 30-35, octosporis; sporidiis fusiformibus, transverse 2-4-8-, demum 15-septatis, perpendiculariter plerumque 3-4-septatis itaque muriformibus, hyalinis, interdum medio subconstrictis, 40-42 \times 12-14, di-tristichis; paraphysibus ramosis, 1 μ . lat., septatis, hyalinis.

Hab. in foliis *Adianti curvati*, São Francisco Brasiliæ (ULE, comm. doct. PAZSCHKE). — Sporidiis majusculis, crebro multi-septatis dignoscenda species.

BOERLAGELLA Penz. et Sacc. — Syll. XIV p. 612.

1. *Boerlagella argentinensis* Spegazz., An. Mus. Nac. Buenos Aires ⁴²¹¹ t. XIX (1909) p. 388. — Maculis nullis; peritheciis solitariis superficialibus subglobosis 250-300 μ . diam., circa ostiolum impressum eximie densiusculeque setuloso-penicillatis, pilis erectis rigidulis apice obtusiusculis, 100-180 \times 6-8, 3-septatis fuligineis pellucidis; ascis subcylindraceis breviter pedicellatis, a paraphysatis, octosporis, 200-230 \times 30-40; sporidiis ellipsoideis v. obsolete subovoideis transverse 3- verticaliter 1-septatis, ad septa transversa contractulis 40-55 \times 18-22, diu hyalinis postremo pallide subchlorinis v. fumosis, muco semper destitutis.

Hab. ad culmos aridos subputrescentes *Secalis cerealis*, La Plata Rep. Argentina. Amer. austr.

WINTERIA Rehm. — Syll. II p. 225 ex p., IX p. 870 (*Winterina* ex p.), XIV p. 612, XVI p. 554.

Teste cl. Höhnel, Fragm. Myk. VIII (1909) p. 50-57 species huius generis heteroclyti pleræque emendandæ sunt. Nempe:

W. excellens Rehm, ipso auctore Rehmio consentiente, est *Odontotrema hemisphaericum* (Fr.).

W. lichenoides Rehm, *W. viridis* Rehm et *W. cembrincola* Rehm, sunt, teste v. Höhnel, lichenes *Microglæna* Körb. peraffines.

W. ordinata (Fr.) Sacc. esset = *Zignoella dolichospora* Sacc.

W. tuberculifera E. et Ev. = *Winterina tuberculifera* (E. et Ev.) Sacc. Syll. XIV p. 589.

W. Zahlbrückneri Bäuml. Est forte *Odontotrematis* species.

W. culmigena Karst. et Maubl. = *Gibberella Saubinetii* (Mont.) Sacc.

W. aterrima Hazsl., teste v. Höhn. est omnino dubia.

W. rhoina Ell. et Ev. et *W. crustosa* Ell. et Ev. propius accedunt ad gen.

Leptosporella Penz. et Sacc.

W. lobata Fr. et Earl., opinante v. Höhn. potius Discomyctem quendam sistit.
W. oxyspora Penz. et Sacc., opinante eodem v. Höhn. melius diceretur *Bertia* (Rehmiomyces) *oxyspora* (P. et S.) v. Höhn. sed certe a typo *Bertia* omnino abhorret, hinc rectius sect. Rehmiomyces in genus proprium erigenda et tunc *R. oxysporus* dicendus.

1. *Winteria subcærulescens* (Nyl.) Rehm Ascom. n. 1242 (1898), Ver. 4212
rucaria subcærulescens Nyl. Flora 1872, p. 326 - Teste Rehm l. c. huc spectant: *W. cærulea* Ell. et Ev. - Syll. IX, pag. 910. — *Polyblastia acuminans* Nyl., Labouan (1891) p. 45, et teste prof. v. Höhnel (Fragm. VIII, p. 55) synonyma sunt quoque *W. laricina* v. Höhn. (1909) et *W. intermedia* Sacc. et Fautr. Verisimiliter sunt potius varietates v. formæ. Prof. v. Höhnel pro hac specie a Lichenibus certe distincta, nomen novum *Mycoglæna* proponit sed prorsus inutiliter cum servari debeat *Winteria* Rehm emend.

JULELLA H. Fabre — Syll. II p. 289, IX p. 899, XVI p. 217.

1. *Julella Zenkeriana* P. Henn., Engl. Jahrb. XXXVIII (1905) p. 127. 4213
— Peritheciis gregarie sparsis cortice exteriori flavo-brunneo, incrassato innatis, hemisphaerico-superficialibus, flavo-brunneis, vertice anulato-discoideis, pallidis, ostiolo papillato atro prominulis, c. 1-1,5 mm. diam.; ascis late clavatis, crasse tunicatis, stipitatis, apice rotundato-obtusis, 2-4-sporis, 280-350 × 60-70, paraphysibus filiformibus, ramosissimis, hyalinis, c. 2 μ. cr.; sporidiis congregatis cylindraceis, utrinque rotundatis, longitudinaliter et transverse pluriseptatis, clathroideis, hyalino-flavidulis, 140-220 × 30-40.

Hab. in ramis corticatis, Bipindi Kamerun Africæ centr. (ZENKER). — *J. dactylosporæ* Rehm affinis, sed differt ascis stipitatis, sporidiis pallidioribus etc.

2. *Julella leopoldina* Rehm, Ann. Mycol. VI (1908) p. 319. — Perithecii gregariis cortice innatis, epidermide arcte adnatis, plus minusve versus apicem denigratis, velatis, globosis ca. 1 mm. diam., ostiolo non papillato, perspicuo, poro pertuso, atris, excipulo fuscō, subcarbonaceo; ascis clavatis, apice rotundatis, ca. 200 × 50, octosporis; sporidiis fusiformi-ellipsoideis, utrinque subacutatis, transverse 9-11(-13)-septatis, longitudinaliter 2-4-septatis, quaque cellula 1-guttata, flavidulis, dein brunneis, 70-85 × 20-25, semi-libus atropurpureis, plicato-corrugatis, tristichis; paraphysibus septatis, 1 μ. crassis, subramosis, hyalinis, muco hyalino coalitis, iodi ope rubro-vinoso-tinctis.

Hab. ad ramos, Sao Leopoldo, Rio Grande do Sul Brasiliae
(THEISSEN S. J.) — *Julellæ argentinæ* subaffinis.

3. *Julella lizonensis* P. Henn., Hedwigia XLVII (1908) p. 257. — 4215
Peritheciis gregariis cortice nidulantibus, simplicibus, globuloso-de-
pressis, atro-carbonaceis, papillatis, vertice poro pallido perforatis,
1-1 $\frac{1}{2}$ mm. diam.; ascis clavatis 40 μ . c. cr., 2-raro 4-sporis; pa-
raphysibus copiosis, filiformibus, 2 μ . c. cr.; sporidiis monostichis
cylindraceis v. fusoideis, utrinque obtuso-rotundatis, 12-16-septa-
tis, clathrato-reticulatis, atro-brunneis, 80-120 \times 20-23.

Hab. in cortice arboris indet. Luzon, Prov. Benguet, Ins. Phi-
lippin., mart. 1904 (ELMER).

PELTOSPHÆRIA Berl. — Syll. IX p. 898, XVII p. 744.

1. *Peltosphæria vitrispora* (C. et H.) Berl. — Syll. IX, p. 898. — 4216
forma *Oleæ* v. Höhn, Fragn. z. Mykol., Sitzb. k. Ak. d. Wiss.
Wien, Bd. CXVI, Abt. I (1907) p. 624. — A typo præcipue dif-
fert matrice et sporidiis distichis (ascis 100-120 \times 22-25).

Hab. in ramulis Oleæ europææ, in ins. Coreyra [Corfu]
(EGGERTH)

TEICHOSPORELLA Sacc. — Syll. II p. 303, IX p. 908, XI p. 351,
XVII p. 744.

1. *Teichosporella callimorpha* Syd., Deutsche Zentral-Afrika Exped. 4217
1907-1908 II Bd. (1901) p. 99. — Peritheciis superficialibus, dense
gregariis, globosis, e mutua pressione sæpe irregularibus, $\frac{1}{2}$ - $\frac{3}{4}$ mm.
diam., obscure brunneis, carbonaceis, ostiolo papilliformi impresso
præditis; ascis cylindraceo-clavatis, apice rotundatis, parum incras-
satis, p. sp. 140-175 \times 20-35, stipite c. 70 μ . longo præditis, octo-
sporis; paraphysibus numerosis, filiformibus; sporidiis distichis,
transverse 10-18-septatis, quaque cellula longitudinaliter 2-3 sep-
tata, hyalinis, elongato-ellipsoideis, v. subfusiformibus utrinque le-
niter attenuatis, sed obtusulis, 45-65 \times 12-18, haud constrictis.

Hab. in ramulis Leguminosæ cajusdam, Beni Africæ trop.

Sect. 9. Phæodictyæ.

PLEOSPORA Rabenh. — Syll. II p. 241, IX p. 873, XI p. 342,
XIV p. 594, XVI p. 544, XVII p. 747.

1. *Pleospora herbarum* (Pers.) Rab. — Syll. II, p. 247. — Var. Co- 4218

Ryphæ Cav. et Moll., Atti Ac. Gioenia Sc. Nat. XIX, Mem. II (1906) Extr. p. 29, cum tab. — A typo differt peritheciis globoso-conoides numquam collabescientibus, ostiolo in collum prælongum, cylindraceum, arcuatum protracto.

Hab. in foliis *Coryphæ australis* quam valde vexat in Horto Botanico Catania, Siciliæ. — Var. *Galii* Lamb. Rev. myc. XIII (1891) p. 1, t. 112, f. 7 (Notæ et ic. biolog.). — In caule *Galii Aparinæ* in Belgio. — Var. *Cheiranthi* Cocc. et Mor., Funghi di Bologna Cent. II, n. 196, t. un., fig. 4 (*P. Cheiranthi*). — Peritheciis globosis $\frac{1}{2}$ mm. diam.; ascis 145-160 \times 24-30; sporidiis ovato oblongatis, 33-36 \times 14-16, luteo-brunneis, 7-septatis crebreque muriformibus. — In siliquis *Cheiranthi Cheiri* in Italia bor. — Var. *Liriodendri* Berl., N. Giorn. bot. it. XX (1888) p. 100; t. V, f. 3. — Peritheciis minoribus; ascis clavatis 110-120 \times 20-24; sporidiis elongato-oblongis, 32-36 \times 14-16, luteis, 7-septatis parceque muriformibus. — In foliis emortuis *Liriodendri* in Lusitania (MOLLER). — Var. *Marrubii* Berl. l. c. p. 100, t. V, f. 6. — Peritheciis majusculis 500 μ . diam., papillatis; ascis 110-130 \times 28-30; sporidiis utrinque acutulis, 30-32 \times 10-12, flavis, 7-8-septato-muriformibus. — In caulibus *Marrubii vulgaris* in Italia boreali (PASSERINI). — Var. *Psoraleæ* Berl., l. c. p. 100, t. V, f. 4. — Peritheciis globoso-depressis, obtuse papillatis, 300 μ . diam.; ascis 70-80 \times 22-24; sporidiis 7-septatis parceque muriformibus, 28-30 \times 12-14, luteis. — In caulibus *Psoraleæ bituminosæ* pr. Neapolim (herb. SACCARDO). — Var. *subsulcata* (Ell. et Ev.) Sacc. et Trav. — Syll. XX, p. 439 — *Pl. subsulcata* Ell. et Ev., in Proc. Roch. Acad. (1900) pag. 44, t. IV, f. 1-2, *Pl. herbarum* forma Fairm., l. c. (1905) p. 182. — Sporidiis 6-7-septato-muriformibus, strato hyalino crasso obductis. — In caule *Allii?* New York Amer. bor. — var. *coluteicola* P. Henn., Verh. Bot. Ver. Prov. Brandenb. XLVII (1905) p. XI. — Peritheciis depresso-globosis, nigris, 200-260 μ . diam.; ascis oblongo-clavatis 100-160 \times 20-40, octosporis; sporidiis subdistichis, oblongo-clavatis, raro subfusoides, uno v. binis apicibus acutatis, 5-7- raro 8-septato-muriformibus, 25-40 \times 11-18. — In ramulis emortuis *Coluteæ arborescentis* prope Lanke in Brandenburg.

2. *Pleospora Lepidii* Hollós, Ann. Mus. Nat. Hung. V (1907) p. 454. 4219
— Peritheciis dense gregariis, erumpentibus, nigris, glabris, superne depresso-depressis, ostiolo breve cylindraceo donatis, 320-380 μ . diam.; ascis cylindraceis, apice rotundatis, breve stipitatis, 2-4-plerumque

4-sporis, 100-120 \times 12-16, filiformi paraphysatis; sporidiis oblique monostichis, fusoideis, 5-7-septatis, ad septum medianum constrictis, longitudinaliter 1-3-septatis, flavis 24-30 \times 8-10.

Hab. in caulibus siccis Lepidii crassifolii prope Kecskemét Hungariæ.

3. **Pleospora minuta** Kirschst., Verh. Bot. Brandenb. XLVIII 4220

(1906) p. 56. — Peritheciis plerumque sparsis, punctiformibus, breviter papillatis, nigris, membranaceis, levibus, subepidermicis dein superficialibus, globosis, demum applanato-collabescentibus; ascis clavatis, brevissime pedicellatis, supra rotundatis, 80 \times 10-12, octosporis; sporidiis supra distichis infra monostichis, fusoideis, utrinque rotundatis, quandoque etiam inaequilateris, flavis, demum obscure brunneis, transverse 5-9-septatis et quandoque imperfecte longitudinaliter 1-septatis, ad septa constrictulis, 18-25 \times 6; paraphysibus numerosis, filiformibus, ramosis, hyalinis.

Hab. in caulibus siliquisque Erysimi repandi prope Rathenow Germaniæ.

4. **Pleospora tessellata** Ferdinand. et Winge, Botan. Tidsskrift 29 4221

Bd. (1909) p. 319, fig. 8. — Peritheciis per corticem erumpentibus, demum superficialibus, applanatis, depresso-globosis, ambitu circulari v. parum elongato, $1\frac{1}{4}$ - $1\frac{1}{2}$ mm. diam., nigris; ascis maturis ellipsoideo-saccatis, e pressione sporidiorum hinc inde irregulariter bullatis, parte spor. 120-140 \times 60-75; sporidiis octonis, disticho-conglobatis congregatisve, ovoideis, utrinque truncatis, medio parum constrictis, transverse constanter 7-septatis, septis longitudinalibus, in fronte qualibet sporidii ternis visis regulariter tessellatis, 40-50 \times 21-26, obscure brunneis, demum impellucidis, tunica mucosa persistenti, ad 4 μ . cr. hyalina indutis.

Hab. ad ramulos siccos corticatos Zygophyllacearum sp. in Chilé (CUMING).

5. **Pleospora Xanthoceratis** Hollós, Ann. Mus. Nat. Hung. IV (1906) 4222

p. 334. — Peritheciis sparsis, superficialibus, depresso-globosis, nigris, 280-320 μ . diam., contextu parenchymatico; ascis cylindraceo-clavatis, breve stipitatis, octosporis, 160-180 \times 24-32; paraphysibus filiformibus, septatis; sporidiis monostichis, vel inordinate distichis, oblongo-ellipsoideis, melleis, 3- dein 7-septatis, muriformibus, medio constrictis, 32-38 \times 16-18.

Hab. in ramulis emortuis Xanthoceratis sorbifolii culti, Kecskemét Hungariae.

6. **Pleospora oligasca** Bubák, Bull. Herb. Boiss. 2. sér. VI (1906) 4223

p. 401. — Peritheciis plus v. minus crebre distributis, globosis, supra collo plus minusve elongato auctis, circ. 90 μ . diam., nigris, parietibus crassis donatis, primum subepidermicis dein collo erumpentibus, contextu brunneo-nigro distincte parenchymatico; ascis paucis, late ovoideis, utrinque angustatis, 45 \times 22-24, crasse tunicatis, supra rotundatis incrassatisque, infra breviter pedicellatis, octosporis; sporidiis elongatis 26-31 \times 8,5-11, flavidulis, transverse 5-6-septatis, parte superiore 2-3-septata et 8,5-11 μ . lata, inferiore 4-septata et 6,5-9 μ . tantum lata.

Hab. in inflorescentiis siccis *Helianthemum canum* var. acutifolii, M. Gradiste prope Kolasin Montenegro, 2000 m. alt. — A *Pl. Fumanae* diversa.

7. **Pleospora Silenes** Earle, Bull. of the New York Bot. Gard. (1904) 4224
 p. 194. — Peritheciis gregariis in maculis nigricantibus insidentibus, prominentibus, cuticula mox lacerata erumpentibus, nigris, collabescentibus, 200 μ . circ. diam., ostiole minute papillato, inconspicuo; ascis cylindraceis v. anguste ellipsoideis, breviter stipitatis, crasse tunicatis, circ. 140 \times 30; paraphysibus filiformibus, angustis; sporidiis distichis, ovoideis v. ellipsoideis, compressis, obscure brunneis, 3-septatis, una v. binis cellulis mediis septo verticali divisis, ad septa constrictis, apice obtusis, circ. 30-35 \times 14-18.

Hab. in caulinis emortuis *Silenes* sp., Clear Creek Cañon prope Carson, Nevada Amer. bor. (C. F. BAKER).

8. **Pleospora Colobanthi** P. Henn., Deutsche Südpolar Exped. Bd. 4225 VIII (1906) Extr. p. 12, tab. II, fig. 10 a-b. — Peritheciis sparsis, innato-suberumpentibus, depresso-globosis, poro pertusis, atro-membranaceis, c. 150-180 μ . diam.; ascis clavatis, apice obtuse rotundatis, octosporis, 90-110 \times 20-30; sporidiis subdistichis v. subtristichis, oblongis, utrinque rotundatis, 6-7-septatis, medio constrictis, muralibus, 25-30 \times 12-15, melleis dein fusco-brunneis.

Hab. in foliis *Colobanthi kerguelensis*, Kerguelen Van-höffen-Insel (Dr. VANHÖFFEN).

9. **Pleospora Alsines** Hollós, Ann. Mus. Nat. Hung. IV (1906) p. 332, 4226 tab. VIII, fig. 5. — Peritheciis sparsis, depresso-globosis, nigris, ostiole brevi cylindraceo, 210-240 μ . diam.; ascis clavatis, breve stipitatis, 8-sporis, 80-100 \times 14-16; paraphysibus filiformibus, septatis; sporidiis oblique monostichis v. inordinate distichis, oblongo-ellipsoideis, melleis, dein castaneo-umbrinis, 3-septatis, ad septa constrictis, loculo uno vel duobus intermediis longitudinaliter divisis, 20-28 \times 8-12.

Hab. in foliis siccis Alsines vernæ prope Kecskemét Hungariae. — A *Pleosp. nivalis* Niessl diversa.

10. **Pleospora Cerastii** Feltg., Vorst. Pilzfl. Luxemb. Nachtr. IV (1905) 4227 p. 84. — Peritheciis sparsis, omnino tectis, vix papillulatis, globoso-depressis, brunneis, basi hyphis brunneis limitatis, 0,2-0,25 mm. dm., contextu flavo-brunneo grosse parenchymatico; ascis clavatis, breviter crasseque pedicellatis, supra late rotundatis v. subattenuatis, octosporis, 80-108 \times 16-21, paraphysibus filiformibus obsitis; sporidiis distichis, ellipsoideo-fusoideis, obtusis, rectis v. curvulis, 5-septatis, ad septa constrictulis, loculis mediis longitudinaliter uniseptatis, flavis, guttulatis, 22-27 \times 8-9.

Hab. in foliis caulinibusque Cerastii tomentosi, Mahlberg Luxemburgia.

11. **Pleospora cereicola** Speg., Fungi Chilenses (1910) p. 85. — Pe- 4228 ritheciis sparsis ligno denudato plus minusve infossis subglobosis coriaceo-membranaceis, atris opacis, 150-180 μ . diam.; ascis cylindraceis breviter pedicellatis paraphysatis, 120-130 \times 12; sporidiis obovatis fusco-fuligineis parvis, transverse 3-septato-constrictulis septis 1 v. 2 longitudinaliter divisis, 14-16 \times 8-9.

Hab. in ligno emortuo Cerei Quisco in collibus prope Batuco Chile Amer. austr. — *Pl. Saccardianæ* Berl. affinis.

12. **Pleospora opuntiicola** Bubák, Bull. Herb. Boiss. 2 sér. VI (1906) 4229 p. 401. — Peritheciis in maculis magnis griseo-cinereis sparsis v. gregariis, epidermide diu tectis, dein collo 100-120 μ . lato erumpentibus, globosis, 300-400 μ . latis, nigris, contextu crasso, parenchymatico, infra olivaceo-brunneo supra nigricante; ascis cylindraceis, 90-130 \times 10-11, supra rotundatis basi in pedicellum brevem tenuatis, rectis v. curvis, crasse tunicatis, octosporis, hyalinis, paraphysibus filiformibus numerosis obsitis; sporidiis elongatis, 15,5-18,5 \times 6,5-7,5, triseptatis et septo longitudinali plus minusve evoluto donatis, medio fortiter constrictis, utrinque rotundatis, flavo-brunneis, oblique monostichis v. supra subdistichis.

Hab. in cladodiis vivis Opuntiæ Fici-indicæ prope Ulcinj Montenegro.

13. **Pleospora trevoicola** Speg., Fungi Chilenses (1910) p. 92, cum 4230 icon. — Peritheciis sparsis v. laxe gregariis, primo cortice tectis, dein denudato-subsuperficialibus, subhemisphæricis non papillatis, atris glabris v. hyphis paucis radiantibus cinctis, membranaceis, 150-180 μ . diam.; ascis e cylindraceo subclavulatis brevissime pedicellatis, paraphysatis, octosporis, 100-120 \times 25-30; sporidiis pro-

teiformibus, ellipsoideo-didymis v. subclavulatis, transverse 1,3,5,7-septato-constrictulatis, loculis nullis, paucis v. omnibus septis 1 vel 2 longitudinalibus divisis, primo flavis dein fuligineis, 25-32 v. 10-14.

Hab. in ramulis siccis Trevoæ trinervis in collibus San Bernardo prope Santjago Chile Amer. austr.

14. **Pleospora Trevoæ** Speg., Fungi Chilenses (1910) p. 86. — Pe. 4281
ritheciis primo epidermide tectis, dein subsuperficialibus nudis, laxe gregariis, lenticulari-hemisphæricis, parvis, ostiolo minute papillato ornatis, atris glabris carbonaceis, 150-180 μ . diam.; ascis cylindraceis breviter pedicellatis, densiuscule paraphysatis, 150 v. 12; sporidiis oblique monostichis, ellipsoideo-subovatis, mediocribus, fuligineis, transverse 3-septatis, ad septum medium constrictis, loculis centralibus septo altero longitudinali divisis, 18-24 v. 8-10.

Hab. in ramis siccis Trevoæ trinervis in collibus San Bernardo prope Santjago Chile Amer. austr. — *Pl. Saccardiana* Roum. affinis sed differt ascis et sporidiis majoribus.

15. **Pleospora ligni** Kirschst, Verh. Bot. Ver. Prov. Brandenb. XLVIII 4282 (1906) p. 57. — Peritheciis in greges dispositis, ligno immersis, ostiolo prominentibus, nigris, membranaceis, 200-300 μ . diam.; ascis cylindraceo-clavatis, in pedicellum brevem tenuatis, supra rotundatis, plerumque 200 v. 24, quandoque etiam duplo longioribus, octosporis; sporidiis infra mono- supra distichis, fusoideis, pallide dein obscure brunneis, plerumque transverse 9-longitudinaliter 2-septatis, non constrictis, 36-45 v. 12-15; paraphysibus hyalinis, filiformibus, septatis, ad septa constrictis.

Hab. in ligno denudato Rhamni Frangulae prope Rathenow Germania.

16. **Pleospora Evonymi** Fuck. — Syll. II, pag. 258 — f. *ramealis* 4283 Feltg., Vorst. Pilz-Fl. Luxemb. IV (1905) pag. 86. — A typo differt peritheciis non depressis, vix papillatis; ascis sporidiisque majoribus.

Hab. in ramis corticatis Evonymi europæi, Luxemburgia.

17. **Pleospora Acænæ** P. Henn., Deutsche Südpolar-Exped. Bd. VIII 4284 (1906) Extr. p. 11, tab. II, fig. 8 a b. — Peritheciis sparsis, innoto-erumpentibus, subglobosis, atro-membranaceis, subpapillatis, porosis, 150-180 μ ; ascis fusoideo-clavatis, apice attenuatis, rotundato-obtusis, 70-80 v. 12-16, octosporis; paraphysibus filiformibus, hyalinis, septatis; sporidiis oblique monostichis v. subdistichis, oblonge fusoideis v. clavatis, utrinque obtusiusculis, primo hyalinis,

continuis v. medio 1-septatis, deinde fuscidulis, 7-septatis, interrupte muralibus, 20-25 × 5-6.

Hab. in ramis decorticatis *Acaena* ascendantis, Kerguelen Magnetbergs (E. WERTH).

18. *Pleospora rudis* Berl. in N. Giorn. bot. ital. XX (1888) p. 45, 4285 t. I, f. 12, Ic. fung II, p. 9, t. X, f. 1. — Peritheciis atris, epidermide tectis, globoso-conoideis, 300 µ diam., ostiolo obtusissimo vix conspicuo suberumpentibus, ascis oblongo-clavatis in stipitem nodulosum abeuntibus, 90-100 × 27-30, octosporis; sporidiis subdistichis, ovoideo-oblongis, utrinque rotundatis vel deorsum tenuatis, medio subconstrictis, sursum crassioribus, 4-septatis parceque muriformibus, 28-32 × 12-14, fuligineis.

Hab. in caulinis emortuis *Astragali Johannis* in montibus Persie australis.

19. *Pleospora aureliana* Fairman, Ann. Mycol. IV (1906) pag. 328, 4286 fig. 3. — Peritheciis sparsis, erumpenti-superficialibus, minutis, depresso-globosis, atris; ascis oblongo-clavatis, apice late rotundatis, breve noduloso-stipitatis, octosporis, 113 × 20-23; paraphysibus filiformibus; sporidiis subellipsoideis, medio constrictis, 6-9-septatis, sursum crassioribus, muriformibus, guttulatis, distichis, initio hyalinis vel pallide flavis, deinde fuscis, 27-30 × 10-13.

Hab. in superficie externa leguminis *Robiniae Pseudacaciae*, Lyndonville Orleans C. (= Aurelia, unde nomen speciei), New York America bor. — A *Pleospora leguminum* satis diversa.

20. *Pleospora Spinosa* Rolland, Bull. Soc. Mycol. Fr. (1905) p. 25, t. I, 4287 f. 3. — Peritheciis gregariis, cortice infossis, epidermidem pustulatim inflatam ostiolo papillato perforantibus, subglobosis, 0,2-0,5 mm. diam., contextu parenchymatico; ascis tereti-clavatis 100-150 × 10-12, octosporis, filiformi-paraphysatis; sporidiis monostichis, oblongis, utrinque paullulo rotundato-tenuatis crasse 3-4-septatis parceque muriformibus, ad septa, praesertim medium, constrictis, rufis, 18 × 8.

Hab. in ramulis *Calycotomæ spinosæ*, Sa Coma et Como negra in insul. Balearibus.

21. *Pleospora persica* Syd., Ann. Mycol. VI (1908) p. 18. — Peritheciis sparsis vel aggregatis, diutius epidermider tectis, atris, depresso-globosis, 200-350 µ diam., membranaceis, basi hyphis fuscis septatis præditis, glabris; ascis varie formæ, plerumque saccatis vel late cylindraceis, sæpe varie curvis, subsessilibus, 110-200 × 30-55, octosporis; sporidiis irregulariter distichis, subclavatis, to-

tis transverse 8-9-septatis, ad septum tertium superum plerumque valde constrictis ideoque quasi e duobus segmentis constantibus, segmento supero breviore sed crassiore, infero multo longiore sed angustiore, longitudinaliter 1-2-septatis, brunneis, totis 42-58 \times 12-21, segmento supero apice rotundato ibique membrana hyalina valde incrassata (usque ad 5 μ) prædicto.

Hab. in caulinis siccis Diplotæniae cachrydifoliæ, ad Jaila Assalek inter Asadbar et Gerab, Elbrus occid. Persiæ (J. BORNMÜLLER).

22. *Pleospora intermedia* Speg., Fungi Chilenses (1910) pag. 88. — 4239

Peritheciis sparsis epidermide plus minusve dealbata tectis, lenticulari-conoideis, vix papillato-ostiolatis, atris, coriacellis, 150 μ . diam.; ascis clavulatis, modice pedicellatis, densissime paraphysatis, 100-120 \times 14-16, octosporis; sporidiis anguste ellipsoideo-subcylindraceis, transverse 5-septatis, ad septa, ad medium præcipue, constrictulis, mediocribus, olivaceis, loculis, 1-2 v. 4 centralibus septo altero continuo divisis, 20-24 \times 8-10.

Hab. in pedunculis siccis Asteriscii chilensis, Cerro Caracol de Concepcion Chile Amer. austr. — *Pleosp. mediae* affinis sed distincta.

23. *Pleospora kerguelensis* P. Henn., Deutsche Südpolar-Exped. Bd. 4240

VIII (1906) Extr. p. 11, tab. II, fig. 9 a-b. — Peritheciis sparsis, innato-erumpentibus, subglobosis v. ovoideis, atro-membranaceis, subpapillato-pertusis, 150-200 μ . diam.; ascis late clavatis, vertice rotundato obtusis, ad basim attenuatis, 140-185 \times 20-30, octosporis; paraphysibus filiformibus, pluriseptatis, submoniliformibus, hyaliniis, 3-4 μ . cr.; sporidiis oblique monostichis vel subdistichis, oblonge ellipsoideis v. subfusoideis v. subclavatis, obtusis, melleis dein fusco-brunneis, 7-septatis, 2-3-interrupte muraliformi-divisis, cellulis constrictiusculis, medio haud constrictis, 30-40 \times 11-15.

Hab. in foliis Azorellæ Selaginæ, Kerguelen, Grüne Insel (E. WERTH).

24. *Pleospora Jaapiana* Rehm, in Jaap Abh. Bot. Ver. Prov. Bran. 4241

denb. IL(1907) p. 16. — Peritheciis gregariis, primum immersis dein liberis, sessilibus, globoso-conoideis breviter ostiolato-papillatis, demum collabescendo depresso, levibus, membranaceis, 250-300 μ . d.; ascis elongato-clavatis, supra rotundatis, 150-180 μ . long., 40-45 μ . cr., octosporis; sporidiis elongatis, utrinque acutatis, fere parallelogrammicis, medio quandoque constrictulis, primum 3-dein 7-septatis, cellulis intermediis crassioribus, nucleos crassos

oleosos includentibus, flavo-stramineis, 42-55 (plerumque 45) \times 17-22, distichis; paraphysibus filiformibus, septatis, hyalinis.

Hab. in caulis siccis vetustis Plantaginis maritimæ, in Ins. Röm Schleswig-Holst., Germania. — Ob sporidia parallelogrammiformia, nec ovoidea v. fusoidea, ab affinibus speciebus distincta.

25. **Pleospora breviasca** Berl. in N. Giorn. bot. it XX (1888) p. 45, 4242 t. I, fig. 14, Ic. fung. II, p. 9, t. X, f. 3. — Peritheciis sparsis, minutis, 200 μ . diam., epidermide velatis, ostiolo papillato-conoideo erumpentibus; ascis oblongis, brevissime et crasse nodulosostipitatis, octosporis, 70-80 \times 22-24; sporidiis subdistichis ovoideo-oblongis, utrinque rotundatis, medio leniter constrictis, 24-28 \times 13-15, transverse 5-septatis, septis mediis ternis primariis multo crassioribus, loculis septo longit. divisis, melleis, muco obvolutis.

Hab. in ramulis Euphrasiæ luteæ, Vigheffio pr. Parmam Ital. bor. (PASSEBINI).

26. **Pleospora magnifica** Peck, Bull. Torr. Bot. Cl. XXXIII (1906) 4243 p. 221. — Peritheciis minutis, primum epidermide tenui tectis, dein erumpentibus v. subsuperficialibus, hemisphæricis v. depresso globosis, nigris, ostiolo minuto inconspicuo præditis; ascis oblongis, cylindraceis, 200-240 \times 48-60; sporidiis magnis, coloratis, confertis v. distichis, oblongis v. uno apice leniter angustatis, obtusis, 7-9-septatis et septis 3 longit. præditis, 65-75 \times 25-35.

Hab. in caulis siccis Phlogis sp., Silver Lake, Utah Amer. bor. (A. O. GARRETT).

27. **Pleospora Asclepiadearum** Mac Alp., Austral. Fungi Dec. I-II, 4244 pag. 378 (Proceed. Linn. Soc. New S. Wal. 1902) — Peritheciis subgregariis, epidermide tectis, dein partim nudatis, minutis, nigris, punctiformibus, globosis, 190-225 μ . diam. ostiolo minuto; ascis oblongo-cylindraceis, apice rotundatis, 100 \times 17-19, in basim nodulosam tenuatis; paraphysibus hyalinis, ascum æquantibus, apice usque ad 11 μ . dilatatis; sporidiis distichis v. partim submostichis, ellipsoideis, 5-septatis, ad septa constrictis, septis longitudinalibus quaternis partitis seu muriformibus, 28-30 \times 10-12, olivaceis.

Hab. in foliis Hoyæ carnosæ in Australia merid. (MOLINÉUX). — Inter perithecia adsunt hyphæ septatae, ramosæ, fumo-so-brunneæ.

28. **Pleospora robusta** Speg., An. Mus. Nac. Buenos Aires t. XIX 4245 (1909) p. 390. — Peritheciis primo cortice tectis dein denudato-

superficialibus subcarbonaceis e lenticulari subglobosis 150 μ . diam.; ascis subcylindraceis vix pedicellatis 7-10 in quoque perithecio 100 \approx 30-40, pseudoparaphysibus paucis commixtis; sporidiis tristichis utrinque obtusis 28-34 \approx 14-18, 3-septatis, ad septa, ad medium præcipue, constrictis, longitudinaliter 1-septatis, primo lutescentibus serius subopace fuligineis.

Hab. ad ramulos emortuos Menodoræ robustæ in aridis secus Rio Chubut Argentina America austr.

29. **Pleospora Boldoæ** Speg., Fungi Chilenses (1910) p. 87. — Peri 4246 theciis sparsis subepidermicis lenticularibus coriacellis, minutis, atris, 120-180 μ . diam.; ascis cylindraceo-subclavatis, paraphysatis modice pedicellatis, p. spor. 80 \approx 13-14, totis usque ad 100 μ . long.; sporidiis subellipsoideis fusco-fumosis submedioribus, 3-septatis ad medium constrictis, loculis 1-2 centralibus septo altero verticali saepius divisis, 17-19 \approx 7-8.

Hab. in ramulis siccis Boldoæ fragranis pr. Talcahuano Chile Amer. austr.

30. **Pleospora osyridigena** Bubák, Bull. Herb. Boiss. 2. sér., VI (1906) 4247 p. 402. — Peritheciis in cortice sub epidermide infossis, dein prominulis, globosis, 300-450 μ . lati, nigris, contextu crasso nigro minute parenchymatico; ascis cylindraceis 120-140 \approx 11-13, supra rotundatis infra in pedicellum brevem angustatis, octosporis, paraphysibus longissimis, filiformibus, tenuibus obsitis; sporidiis fufoideis, elongatis, 16-24 \approx 6,5-8,5, ex olivaceo-brunneis pallide castaneo-brunneis transverse 3-4 raro usque ad 5-septatis et septo longitudinali plus v. minus distincto præditis, non v. leniter constrictis, apice saepe acutatis v. rotundatis, monostichis v. supra subdistichis.

Hab. in ramis emortuis Osyridis albæ prope Ulcinj Montenegro.

31. **Pleospora Onosmatis** Hollós, Ann. Mus. Nat. Hung. IV (1906) 4248 p. 333, tab. VIII, fig. 4. — Peritheciis gregariis sparsisque epidermide tectis, dein superficialibus, depresso-globosis, glabris, nigris, ostiolo brevi cylindraceo, 280-350 μ . diam.; ascis cylindraceo-clavatis, breve stipitatis 2-4-6-8-sporis, 60-100 \approx 12-16; paraphysibus filiformibus, septatis; sporidiis oblique monostichis v. distichis, oblongo-ellipsoideis, flavis, 7-septatis, ad septa constrictis, loculis 1-2-3 longitudinaliter septis divisis, 34-44 \approx 10-12 in ascis bisporis, 30 \approx 8 in ascis 4-6-8-sporis.

Hab. in caulis siccis *Onosmatis arenarii* prope Izsák
Hungariæ.

32. **Pleospora Sideritidis** Hollós, Ann. Mus. Nat. Hung. V (1907) 4249

V p. 455. — Peritheciis sparsis, epidermide tectis, depresso-globosis, fuscis, ostiolo papillato, 150-180 μ . diam.; ascis clavatis, breve stipitatis, 8-sporis, 110-140 \times 40-60, filiformi-paraphysatis; sporidiis 2-3-stichis, oblongo-ellipsoideis, 7-septatis, ad septum medium validius constrictis, in longitudine imperfecte uni-septatis, hyalinis, 46-50 \times 20-22.

Hab. in foliis languidis *Sideritidis montanæ* pr. Kecskemét Hungariæ. — An potius *Cathariniae* sp.?

33. **Pleospora Helichrysi** Hollós, Növényt. Közlemén. VI (1907) Extr. 4250

p. 3. — Peritheciis gregariis sparsisque, superficialibus, globoso-depressis, glabris, nigris, minute papillato-ostiolatis, 280-350 μ . diam., contextu parenchymatico; ascis clavatis, breve stipitatis, octosporis, 100-120 \times 12-14; paraphysibus filiformibus, septatis; sporidiis oblique monostichis v. inordinate distichis, clavatis, parte superiore crassiore, deorsum leniter attenuatis, rectis v. saepe curvulis, 5-6-septatis, ad medium valde constrictis, loculis 1-2-3 longitudinaliter v. oblique divisisis, flavidulis, 24-30 \times 7-10.

Hab. in caulis siccis *Helichrysi arenarii* prope Kecskemét Hungariæ.

34. **Pleospora Proustiae** Speg., An. Mus. Nac. Buenos Aires t. XIX 4251

(1909) pag. 392. — Maculis nullis sed ligno toto cinerescente et rimuloso; peritheciis ligno denudato subsuperficialibus, membranaceis in secco corrugato-contractis, laxe gregariis v. subseriatis, globuloso-conoideis, 200-250 μ . diam.; ascis ellipsoideo-subclavatis, subsessilibus 140-150 \times 30-32, parciissime paraphysatis, octosporis; sporidiis elliptico-didymis, 38 \times 18, muriformibus, septis transversis 7, longitudinalibus 1-3 interruptis, primo flavescentibus dein fuligineis, rectis v. leniter inaequilateralibus.

Hab. ad ramos vivos v. languidos *Proustiae ilicifoliæ* in præandinis Cacheuta prope Mendoza Rep. Argentina Amer. austr. — Notis nonnullis externis ad *Teichosporam* vergit, sed peritheciis membranaceis sporarumque fabrica melius sub *Pleospora* militat.

35. **Pleospora Chuquiragæ** Speg., An. Mus. Nac. Buenos Aires t. XIX 4252

(1909) pag. 390. — Foliis infectis totis arescentibus v. pro parte pallide cinerescentibus; peritheciis laxe gregariis coriacellis innato-erumpentibus subhemisphæricis 120-150 μ . diam., non v. vix papillato-ostiolatis; ascis cylindraceis breviter pedicellatis 80-90 \times

20, parcissime paraphysatis, octosporis; sporidiis eximie polymorphis plerumque subellipsoideis 1-3-5 transverse septatis, septo long. nullo v. uno, ad septum medium præcipue constrictulis, 24-25 \times 11-12, mox intense olivaceis fere opacis.

Hab. ad folia arida Chuquiragæ hystricis, secus Rio Santa Cruz, Rep. Argentina Amer. aust.

36. **Pleospora putrefaciens** Frank, Krankheit der Pflanz. II (1896) 4258 p. 299-300, c. f. 1, Prillieux Malad. plant. agric. II, p. 245, f. 339.

— Peritheciis initio tectis, demum epidermide secedente liberis; ascis oblongo-clavatis, octosporis, subsessilibus; sporidiis inæquilater monostichis, ellipsoideo-oblongis, utrinque rotundatis, 7-septatis crebreque muriformibus, 28 \times 9, brunneis, loculis guttulatis.

Hab. in foliis languidis v. jam emortuis Betæ vulgaris in Germania. — In fungilli evolutione præcedit stat. conidioph. (*Clasterosporium putrefaciens* (Fuck.) Sacc. Syll. IV, p. 393) qui Betæ plantas valde vexat et forte necat.

37. **Pleospora Halimi** Maubl., Bull. Soc. Myc. Fr. (1905) p. 89, t. VI, 4254

f. 6. — Peritheciis gregariis, primo tectis, demum superficialibus, depresso-conoideis, nigris, 0,2-0,3 mm. diam.; ascis clavatis, subsessilibus, crasse tunicatis, 80-100 \times 18-24, rarius cylindraceis, 150 \times 16, octosporis filiformi-paraphysatis; sporidiis irregulariter distichis v. in asco cylindrico monostichis, oblongo-ovoideis, primo 3-septatis muriformibusque, melleo-fuscis, 20-26 \times 10-12,5.

Hab. in ramulis Atriplicis Halimi, Pornic Galliæ. — Verisimiliter *Camarosporium Halimi*, quocum species crescit, est st. pycnidicus.

38. **Pleospora Salicorniæ** Jaap, Abh. Bot. Ver. Prov. Brandenb. IL 4255

(1907) p. 16. — Peritheciis sparsis, tectis, dein liberis, globosis, 250-350 μ . diam., parietibus 5-6 μ . cr. (?) et ostiolo brevi conideo præditis; ascis late clavatis, dein clavato-cylindraceis, 135 \times 21, pedicello brevi 8-10 μ . longo præditis, maturis usque ad 200-300 μ . long., octosporis; sporidiis plerumque oblique distichis v. in ascis elongatis recte monostichis, flavo-melleis, ovoideo-elongatis, apice plerumque late rotundatis, 24-28 \times 12-13, transverse 7-septatis, longitudinaliter 1 2, medio distincte constrictis; paraphysibus filiformibus, hyalinis, 3 μ . cr., septatis, multiguttulatis.

Hab. in caulibus vetustis Salicorniæ herbaceæ pr. Morsum in Ins. Sylt, Schleswig-Holst. Germania. — *Pl. Salsolæ* Fuck. affinis. Socia adest *Diplodina Salicorniae* Jaap, n. sp.

39. **Pleospora aurea** Ell. et Ever. North Amer. Pyr. (1892) p. 340, 4256

t. XXVIII, f. 14-17, Mac Alp. Fung. Stone fruit Austr. t. XXII, fig. 53-55. — Peritheciis gregariis, epidermide tectis, 250-300 μ . diam., mox collapsis; contextu crasse parenchymatico præditis, basi mycelio repente, septato, parce ramoso cinctis; ascis amplis, obtusis, sessilibus, 75-114 \times 25; sporidiis distichis, ellipsoideis, applanatis, 4-septatis, aureis, 22-25 \times 12-14 e latere 10-11 μ . cr., loculis mediis ternis septo longit. divisis.

Hab. in caulinis herbaceis, Utah Amer. bor. (HARKNESS).

40. **Pleospora Fagi** Lind, Ann. Mycol. V (1907) p. 274, cum icon. 4257 — Maculis epiphyllis orbicularibus, 2-3 mm. diam., pallescentibus, late nigro-marginatis; peritheciis epidermide tectis, sparsis, globosis, vix 200 μ . diam., levibus, prominentibus; ascis ellipsoideo-clavulatis, sessilibus, octosporis, 82-92 \times 20; paraphysibus numerosis, filiformibus, septatis, hyalinis, obtusis, apice circa 3 μ . cr.; sporidiis distichis, oblongo-ovoideis, rectis, utrinque late rotundatis, 5-septatis, loculis mediis septo longitudinali præditis, non constrictis, flavis, 24-30 \times 9-10.

Hab. in foliis siccis Fagi silvaticæ prope Wiborg in Jütland, Dania.

41. **Pleospora mollis** Starb., Ascom. Schwed. Chaco-Cordill. Exp., 4258 Arkiv f. Bot. Bd. V (1905) p. 24, fig. 21. — Peritheciis immersis, per rimas peridermii gregatim sæpissime in series longitudinales ordinatis erumpentibus, sphæroideis vel mutua pressione difformibus, fere astomis, denique vertice ore minuto perforatis, rugosiusculis, interdum minute plicatulis, reliquias matricis dispersis, contextu mollissimo, parenchymatico, 125-150 μ . d.; ascis octosporis, ellipsoideo-ovatis, sursum rotundatis et incrassatis, sessilibus 56-63 \times 25-30, interdum cylindraceo-clavatis, c. 100 \times 19, nodulosopedicellatis; sporidiis plerumque congregatis, ellipsoideo-oblongatis, inæquilateralibus, interdum fere soleæformibus, triseptatis, medio constrictis, parte supra septum medium latiore, uno altero ve loculo sepimento longitudinali vel obliquo partito, loculis sæpe guttulatis, flavis, denique fuligineis, 21,5-25,5 \times 9; paraphysibus vix ullis.

Hab. in ramulis aridis Ephedræ americanae, Prov. Jujuy, Moreno Argentinæ. — A P. *Ephedræ* Fabr. et homonyma *P. Ephedræ* Speg. diversissima; textura autem et peritheciis aggregatis Cucurbitaricæ *Ephedræ* Tassi affinis est, a qua species nostra, facile Cucurbitaricæ adscribenda, peritheciis multo minoribus et forma ascorum dignoscitur.

42. **Pleospora oblongispora** Rehm, Ann. Mycol. V (1907) p. 542. — 4259

Peritheciis gregariis, innatis, globulosis, papillula minutissima prominente demum prorumpentibus, glabris, nigro-fuscidulis, contextu parenchymatico, 180-200 μ . diam.; ascis clavatis, subsessilibus, 70 \times 12, 8-sporis; sporidiis oblongis, rectis, utrinque valde rotundatis, transverse 5-septatis, cellulis singularibus 2-3 semel longitudinaliter divisis, flavis, 15-18 \times 6-7, distichis; paraphysibus septatis, fere articulatis.

Hab. ad ramulos Laricis deciduae, Meiringen. Helvetia (JAAP). — A *Pleospora laricina* Rehm et *P. obducente* f. *Laricis* Sacc. penitus diversa.

43. **Pleospora Hyacinthi** Sorauer, Pfanzk. II (1886) p. 340, t. 14, f. 10. — 4260

17. — Peritheciis gregariis globoso-lenticularibus, poro pertusis, ex mycelii hyphis brunneis copiosis ramosis orientibus, initio epidermide velatis, 380 μ . lat., 200-275 μ . alt., nigris; ascis articulato-paraphysatis, clavatis, subsessilibus, apice rotundatis, 200 \times 35, octosporis; sporidiis distichis, ellipsoideis, utrinque rotundatis, sursum crassioribus, 7-8-septatis denseque muriformibus, non v. vix constrictis, 26-37 \times 15-17, brunneis.

Hab. in foliis, quæ nigrescunt, *Hyacinthi orientalis* in Germania. — Species valde noxia.

44. **Pleospora pulchra** Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) p. 57. — 4261

Peritheciis in maculis rubidis insidentibus, sparsis, nigris, globosis, membranaceis, immersis, sed ostiolo brevi cylindraceo prominulis, 250 μ . circ. diam.; ascis cylindraceis, subsessilibus, supra rotundatis, octosporis, 180-180 \times 26-33; sporidiis distichis, ovoideis, medio constrictis, transverse 11-14-longitudinaliter 2-septatis, flavis, dein brunneis, 30-40 \times 10-12; paraphysibus numerosis, filiformibus.

Hab. in culmis putrescentibus *Typhæ latifoliæ*, Igelpfuhl prope Gross-Behnitz Germaniae.

45. **Pleospora Lapageriae** Speg., Fungi Chilenses (1910) pag. 93. — 4262

Maculis nullis; peritheciis amphigenis, parenchymate innatis, epidermide tectis, atris, minutis, glabris, poro pertusis, 250 μ . diam.; ascis e cylindraceo subclavulatis, a paraphysatis, octosporis, breviter pedicellatis, 180-200 \times 28-30; sporidiis ellipsoideo-subobovatis, transverse 7-septatis, ad septum medium leniter constrictulis, septis 1 v. 2 longitudinalibus divisis, primo luteis tunica mucosa vestitis, serius fuligineis nudis, 30-42 \times 16-18.

Hab. in foliis emortuis et putrescentibus *Lapageriae roseæ*

in silvis prope Cerro Caracol de Concepcion Chile Amer. austr. — Sporidiis nonnullis videntur lateraliter compressis ideoque illis gen. *Clathrosporæ* similibus.

46. **Pleospora Puyæ** Speg., *Fungi Chilenses* (1910) p. 85, cum icon. 4263
 Peritheciis laxe gregariis parenchymate immersis, epidermide velatis, subglobosis, coriacellis, 200 μ . diam.; ascis cylindraceis apophysatis, brevissime pedicellatis, 100-120 \times 14; sporidiis oblique monostichis ellipsoideis saepius 3-septatis, ad septum medium constrictis, loculis centralibus longitudinaliter, rarius etiam transverse divisis, 18-20 \times 8-9.

Hab. in foliis putrescentibus Puyæ cæruleæ, Cerro S. Cristobal de Santiago Chile Amer. austr. — *Pl. Thumenianæ* Sacc. affinis a qua differt paraphysisibus nullis.

47. **Pleospora proteosperma** Speg., *Fungi Chilenses* (1910) pag. 90 4264
 (sub *proteospore*) et p. 199 (Errata-Corrige) cum icon. — Peritheciis sparsis v. laxe gregariis parenchymate plus minusve immersis, epidermide semper tectis, subconoideis, atris coriacellis, centro collabescentibus, 250 μ . diam.; ascis cylindraceis v. saccatis, subparaphysatis, 2-4-6-8-sporis, 80-140 \times 20-28; sporidiis saepe in eodem asco variabilibus saepius obovatis subdidiymis, septis transversis 1, 3, 5, 7, loculis 0, 1, 2 v. omnibus septis longitudinalibus 1 v. 2 divisis, primo luteis serius fusco-flavescensibus, nudis vel tunica mucosa vestitis, 20-22 \times 8-10, 28-30 \times 11-12, 35-40 \times 14-18.

Hab. in foliis emortuis putrescentibus Puyæ chilensis Cerro Alegre de Valparaiso Chile Amer. austr.

48. **Pleospora præandina** Speg., *An. Mus. Nac. Buenos Aires* t. XIX 4265 (1909) p. 392. — Maculis nullis sed matrice tota sordide cinereo-arescenti; peritheciis hinc inde laxe gregariis epidermide velatis ostiolo valide papillato erumpentibus, 200-250 μ . diam.; ascis subcylindraceis pedicello brevissimo crasso suffultis, 85-90 \times 16-20, paraphysisibus filiformibus parcis obvallatis, octosporis; sporidiis elliptico-didymis, transverse 7-longitudinaliter 1-2-septatis, 22-25 \times 10-11, primo fuligineis serius atris opacis.

Hab. ad folia arida putrescentia Dyckiae cujusdam in præandinis Cacheuta prope Mendoza Rep. Argentina Amer. austr.

49. **Pleospora gigaspora** Karst. — *Syll. IX*, p. 890 — var. *meridiana* 4266 Roll. *Bull. Soc. Myc. Fr.* (1905) p. 25. — Peritheciis sphæroideis, 300-400 μ . diam., ostiolo obtuso emergente; ascis 200-300 \times 50-60, octosporis; sporidiis 8-10-septato-muriformibus, 60-74 \times 24-26, fuco-olivaceis, circulo hyalino tenuissimo obvolutis.

Hab. in foliis languidis Asphodeli macrocarpi, Sa Font de S' Olla et Sa Coma in insulis Balearibus.

50. **Pleospora mauritanica** Maire, Bull. Soc. Bot. Fr. LIII (1906) 4267 ed. 1907) pag. CXCII. — Peritheciis immersis, dein epidermide delapsa nudatis, rotundatis, nigris, apice ostiolo epapillato pertusis; ascis cylindraceis, octosporis, subsessilibus, circ. 40-150 \times 40; sporidiis distichis, flavo-brunneis, majusculis, ellipsoideis, utrinque rotundatis, levibus, transverse 7-9-septatis, longitudinaliter 2-4-seriatim septatis, 45-52 \times 16-21, rarius usque ad 60 \times 26.

Hab. in caulis aridis Asphodeli cerasiferi, in silvis inter Tlemcen et Hafir Africæ bor. — A *Pl. Asphodeli* sporidiis majoribus, magis septatis, obscurioribus diversa.

51. **Pleospora mallorquina** Roll. Bull. Soc. Mycol. Fr. (1905) p. 26, t. I, 4268 f. 4. — Peritheciis globoso-depressis, 0,5 mm. diam., epidermide velatis, subseriatis, papilla vix visibili emergente; contextu parenchymatico; ascis ovoideis vel cylindraceis, crassis, 120-207 \times 50, octosporis, breviter subgloboso-stipitatis, filiformi-paraphysatis; sporidiis 2-3-stichis, primo subfuscoideis, dein ovoideis, melleis, initio 3-septatis, septisque 1-2 longitudinalibus partitis, demum octo-septato-muriformibus, soleiformibus, 52-54 \times 20.

Hab. in caulis Urgineæ Scillæ, Como Negra in insul. Balearibus. — *Pleospora Saccardoi* affinis.

52. **Pleospora Alstroemeriae** Speg., Fungi Chilenses (1910) p. 90. — 4269 Peritheciis sparsis v. laxe gregariis matrice infuscata incidentibus, primo epidermide tectis, sublenticularibus, minute papillato-ostiolatis, coriacellis, 150-200 μ . diam.; ascis cylindraceis v. subsaccatis, subsessilibus non v. parce paraphysatis, octosporis; sporidiis in eodem asco saepius dimorphis, alteris subclavulato-didymis 3-septatis, loculo unico longitudinaliter diviso 24-26 \times 12-14, alteris paullo majoribus 28-30 \times 14-16, subellipsoideis transverse 7-septatis constrictulis, loculis pluribus septis 1 v. 2 longitudinalibus interruptis divisis, omnibus plus minusve lutescentibus.

Hab. in scapis floralibus siccis Alstroemeriae, Cerro Alegre de Valparaiso Chile Amer. austr. — *Pl. herbarum* affinis.

53. **Pleospora Orchidearum** P. Henn., Hedw. XLIV (1905) p. 170. 4270 — Peritheciis caulinis erumpenfi-superficialibus, sparsis v. subgregariis, subglobosis, sepe vertice depressis, perforatis, subcoriacellis, atris, 180-200 μ . diam.; ascis clavatis apice rotundatis, tunicatis, basi curvulis attenuatis, 8-sporis, 100-150 \times 18-30; sporidiis subdistichis, oblonge fuscoideis vel subellipsoideis, utrinque obtu-

siusculis, flavis dein brunneis, 7-septatis, muralii-divisis, 25-38 \approx 10-16.

Hab. in caulis *Phaji Wallichii* in calidariis horti botanici Berolinensis.

54. **Pleospora Neottiae** Hollós, Ann. Mus. Nat. Hungar. VIII (1910) 4271 p. 10. — Peritheciis sparsis, tectis, depresso-globosis, glabris, fuscis, ostiolis minutis, 190-210 μ . diam., contextu celluloso; ascis clavatis, 72-84 \approx 14-18, octosporis, filiformi-paraphysatis; sporidiis distichis, ellipsoideis, transverse 3-septatis, ad septa valde constrictis, loculis mediis in longitudine 1-septatis, luteis, 20-24 \approx 8-10.

Hab. in foliis siccis *Neottiae nidi-avis* prope Kecskemét Hungariæ.

55. **Pleospora Arundinis** Giuditta Mariani, in Atti Soc. Ital. Sc. nat. 4272 L (1911) p. 166, fig. 3. — Peritheciis densiuscule sparsis, foliorum parenchymate immersis, per epidermidem erumpentibus, subgloboso-depressis, atris, distincte ostiolatis, 250-350 μ . diam., contextu minute pseudoparenchymatico, fuligineo-umbrino; ascis late oblongis, subsessilibus, crasse tunicatis, 110-130 \approx 24-28, octosporis; sporidiis irregulariter subdistichis, ellipsoideo-oblongis, medio aliquantulum constrictis, transverse 7-septatis septisque longitudinalibus 1-3 seriatis regulariter divisis, 27-30 \approx 12-14, luteo-brunneis.

Hab. in foliis languidis *Arundinis Donacis*, prope Coimbra Lusitaniae (A. MOLLER). — *Pleosporæ herbarum* certe affinis, sed, ut videtur, sporidiis minoribus distincta.

56. **Pleospora Phragmitis** Hollós, Ann. Mus. Nat. Hungar. VIII (1910) 4273 p. 10. — Peritheciis epidermide tectis, seriatim dispositis, atris, breve papillatis, ellipsoideis, 700 \approx 300, contextu celluloso; ascis clavatis, breve stipitatis, octosporis, 130-160 \approx 20-24; paraphysibus filiformibus, septatis; sporidiis distichis, oblongo-fusoideis, rectis v. curvulis, 9-septatis, septisque uniseriatis longitrorsum divisis, ad septa leniter constrictis, melleis, demum umbrinæ, 44-50 \approx 10-12.

Hab. in culmis putridis *Phragmitis communis* prope Kecskemét Hungariæ.

57. **Pleospora Gaussiana** P. Henn., Deutsche Südpolar-Exped. Bd. 4274 VIII (1906) Extr. p. 12. — Peritheciis sparsis innato-suberum-pentibus, subglobosis, obtuse papillatis, atro-membranaceis, c. 120-140 μ ; ascis clavatis, obtuso-rotundatis, octosporis, 83-105 \approx 10-12; paraphysibus filiformibus, septatis, hyalinis, c. 2 μ . cr.; spo-

ridiis subdistichis, oblongo-ellipsoideis v. clavatis, obtusis, 5-raro 6-septatis, murali-divisis, constrictis, 23-30 v 8-11, atro-fuscis.

Hab. in foliis siccis Festucæ antarcticæ, Kerguelen-Station (E. WERTH). — A *Pl. Forsteri* Speg. peritheciis multo minoribus, ascis sporidiisque majoribus diversa.

58. **Pleospora culmicola** Speg., Fungi Chilenses (1910) p. 89. — Pe. 4275
 ritheciis erumpenti-superficialibus laxe gregariis hemisphaerico-conoideis, valide papillato-ostiolatis, atris glabris coriacellis, 250-300 μ . diam.; ascis cylindraceo-saccatis, breviter pedicellatis, apophysatis, 150 v 22-28; sporidiis ellipsoideo-subbiconoideis mediocribus e luteo fuscis, transverse 7-septatis, septo altero longitudinali continuo divisis, 30-36 v 12-14.

Hab. in culmis Graminaceæ cujusdam (? *Paspali*), Cerro Caracol de Concepcion Chile America austr.

59. **Pleospora Drygalskiana** P. Henn. Deutsche Südpolar-Exped. Bd. 4276 VIII (1906) Extr. p. 12, tab. II, fig. 13 a-b. — Peritheciis sparsis, epidermide nigrefacta tectis, dein ostiolo erumpentibus, subglobosis v. ovoideis, atro-membranaceis, c. 150 μ . diam.; ascis clavatis, apice tunicatis, rotundatis, 8-sporis, 70-100 v 15-22; paraphysibus filiformibus septatis, hyalinis, 2 μ . cr.; sporidiis subdistichis, fusoideis, obtusis v. subaeutiusculis, 4-septatis, interrupte murali-divisis, melleis dein atris, 18-24 v 6-11.

Hab. in foliis emortuis Agrostidis antarcticæ, Kerguelen (E. WERTH). — A *Pl. antarctica* Speg. ascis sporidiisque latioribus, sporidiis nigro-brunneis 4-septatis diversa.

60. **Pleospora Werthiana** P. Henn., Deutsche Südpolar-Exped. Bd. 4277 VIII (1906) Extr. pag. 12, tab. II, fig. 12 a-b. — Peritheciis epiphyllis sparse gregariis epidermide tectis, dein ostiolo erumpentibus, lenticulari-globosis, atris, membranaceis, c. 150-170 μ . diam.; ascis clavatis, apice rotundatis, tunicatis, octosporis, 85-110 v 20-23, paraphysibus filiformibus hyalinis; sporidiis subdistichis, oblongis v. clavatis, obtusis, 3-5-septatis, muraliter divisis, 18-25 v 10-14, primo flavis dein brunneis.

Hab. in foliis Poæ Cookii, Kerguelen (E. WERTH).

61. **Pleospora Vanhoffenii** P. Henn., Deutsche Südpolar-Exped. Bd. 4278 VIII (1906) Extr. p. 12, t. II, f. 11, a-b. — Peritheciis amphigenis sparsis v. gregariis, primo epidermide tectis dein suberumpentibus, subglobosis, pertusis, atro-fuscis, membranaceis, 200-250 μ . diam.; ascis late clavatis apice tunicatis, rotundatis, basi substipitatis, curvatis, octosporis, 90-120 v 33-42; paraphysibus filiformi-

bus, hyalinis, c. 2-3 μ . cr.; sporidiis subdistichis oblongis v. subfusoides, apice rotundato-obtusis, interdum acutiusculis, 7-9-septatis, muriformibus, cellulis angulatis, primo melleis dein fusco-brunneis, 32-40 \times 11-14.

Hab. in foliis *Poa Cookii*, Kerguelen Vanhöffen Insel (E. VANHÖFFEN).

62. **Pleospora Equiseti** A. L. Smith, Trans. Brit. Mycol. Soc. 1908, 4279 v. III (1909) p. 116, tab. VI, fig. 5 a-b-c. — Peritheciis minutis, nigro-brunneis, maculis minutis nigrantibus insidentibus, subglobosis, subepidermicis, non emergentibus, poro apertis, 200-270 μ . diam.; ascis clavatis, brevissime pedicellatis 90 \times 12; sporidiis brunneo-flavis, 5-septatis, cellulis mediis longitudinaliter septatis, 25-27 \times 6-8.

Hab. in caulibus emortuis *Equiseti*, Kilwinning Ayrshire Britannia (D. A. BOYD).

63. **Pleospora Mycenastri** Hollós, Ann. Mus. Nat. Hung. IV (1906) 4280 p. 533. — Peritheciis gregariis, erumpentibus, depresso-globosis, fuscis, poro pertusis, 100-140 μ . diam., contextu parenchymatico; ascis clavatis, apice tunica crassa integra rotundatis, estipitatis, 8-sporis, 54-74 \times 40-50; sporidiis inordinate 2-3-stichis, oblongo-elliptoideis, 3-septatis, non constrictis, loculo 1-2 longitudinaliter divisus, hyalinis, demum fuscouscentibus, 26-32 \times 10-12.

Hab. in endoperidio *Mycenastri Corii* prope Kecskemét, Hungariae.

64. **Pleospora Secotii** Hollós, Annal. Mus. Nat. Hung. IV (1906) 4281 pag. 533. — Peritheciis dense gregariis erumpentibus, depresso-globosis, fuscis, poro pertusis, 100-140 μ . diam., contextu parenchymatico; ascis clavatis, apice tunica crassa integra rotundatis, estipitatis, octosporis, 60-70 \times 26-36; sporidiis inordinate 2-3-stichis, oblongo-elliptoideis, 3- raro 4-septatis, ad septum medium validius constrictulis, loculo 1- interdum 2-longitudinaliter divisus, loculis pluriguttulatis, diu hyalinis, demum fuscouscentibus, 30-36 \times 14.

Hab. in endoperidio *Secotii agaricoidis*, prope Kecskemét Hungariae. — An a præcedente satis distincta?

65. **Pleospora Montagnitis** Hollós, Ann. Mus. Nat. Hung. IV (1906) 4282 pag. 532. — Peritheciis sparsis, depresso-elliptoideis, nigris, poro pertusis, 120-250 \times 100-180, contextu parenchymatico; ascis cylindraceis, breviter stipitatis, 4-6-8-sporis, 70-90 \times 12-14; sporidiis monostichis, oblongis, 3-septatis; ad septum medium validius con-

strictulis, loculis duobus intermediis longitudinaliter divisis, plurumque muriformi-septatis, flavis, dein brunneis, 18-22 x 8-9.

*Hab. in receptaculo Montagnitis radiosi (=M. Candol-
lei) prope Izsák, Hungariae.*

PLATHEOSPOBA Babenh. — Syll. IX p. 894, XVI p. 548.

- 1. Clathrospora constricta** R. Maire, Champ. Asie Min., Bull. Soc. 4288
 Sc. Nancy (1906) Extr. pag. 10, fig. 1. — Peritheciis sparsis v.
 aggregatis, erumpentibus, globoso-depressis, 280-400 μ . diam., le-
 vibus, nigris, ostiolo papillato; ascis oblongo-clavatis, rectis vel
 curvulis, subsessilibus v. breve pedicellatis, 3-8-sporis, paraphy-
 sibus filiformibus mox liquecentibus obvallatis; ascis octosporis 95-
 120 \times 28-34, tetrasporis 85-105 \times 28-31; sporidiis distichis, levibus,
 brunneis, ellipsoideo-complanatis, sursum plerumque rotundatis v.
 obtusis, deorsum saepe plus minusve acutatis, transverse 3-septatis
 (loculis mediis septo longitudinali divisis), ad septa constrictis, 29-
 37 \times 16-19 \times 11-13.

Hab. in caulis aridis *Gypsophilæ olympicæ* in zona
alpina Olympi Bithynici, Anatolia.

2. *Clathrospora ? punctiformis* (Niessl) Berl. — Syll. II, p. 271 (*Pleospora* 4284
spora) — var. *alpina* Rehm, Oesterr. bot. Ztschr. LVI (1906)
p. 297. — Nomen nudum.

Hab. in caulinibus siccis Junci Hostii, Alpeiner-Alpe Stubai Austria.

3. *Clathrospora tirolensis* Rehm, Oesterr. bot. Ztschr. LVI (1906) 4285
p. 297. — Nomen nudum.

Hab. in culmis Graminacearum, Konstanzer Hütte Arlberg Austria.

- Austria.

4. *Clathrospora Stipæ* Trav. in Bull. Soc. Flore Valdôtaine, VIII 4286 (1912). — Peritheciis sparsis vel seriatis, parenchymate immersis eoque arcte adhærentibus, epidermide pustulatim elevatula diu omnino tectis, demum vix erumpentibus, globoso-depressis, 250-300 ~ 150-200, atris, glabris, excipulo minute et irregulariter pseudoparenchymatico, fuligineo-atro, ostiolo papillulato, poro latiusculo pertuso; ascis obovovideo-clavatis v. oblongis, sessilibus, apice late rotundatis ibique tunica vix incrassata, 110-120 ~ 30-36, paraphysibus filiformibus ascos subæquantibus, ad 3 p. crassis obvalatis; sporidiis irregulariter 2-3-sticho-confertis, e fronte visis ellipsoideis, 36-40 ~ 18-19, e latere subfuscoideis, 36-40 ~ 10-12, septis

transversis 7-9, longitudinalibus 3, ad septa singula vix constrictis, flavo-lutescentibus.

Hab. in foliis siccis Stipæ pennatæ supra Berio, alt. 1700 m. (Valpelline, Valle d'Aosta, Ital. bor.). — *Affinis Cl. Elynæ,* in Cyperaceis, a qua satis differt ascis et sporidiis minoribus. Forma depressa sporidiorum in ipso asco plerumque eximie manifesta.

PYRENOPHORA Fr. — Syll. II 277, IX p. 895, XI p. 344, XIV p. 602, XVI p. 549, XVII p. 757.

1. **Pyrenophora pachyasca** Syd., Ann. Mycol. VI (1908) p. 529. — 4287

Peritheciis sparsis, subglobosis, atris, minutis, 150-225 μ . diam., epidermide diu tectis, submembranaceis, superne setis fuligineis rigidis fragilibus septatis, apicem versus dilutioribus, usque ad 250 μ . longis obsitis, ostiolo minuto; ascis variabilibus, saccatis et sessilibus usque cylindraceis et stipite usque ad 35 μ . longo suffultis, octosporis, 100-130(-175) \times 45-60; sporidiis irregulariter distichis, ovato-oblongis, utrinque rotundatis, longitudinaliter plerumque 7-septatis, verticaliter, 2-4-septatis, medio constrictis, obscure olivaceo-brunneis et subopacis, 35-52 \times 20-25

Hab. in foliis Astragali Raswendi in montibus Tefresh Persiæ occ. (Th. STRAUSS). — *P. Androsaces* (Fuck.) Sacc. affinis, ab ea differt setulis longioribus, sporidiis medio constrictis.

2. **Pyrenophora ?ambigua** Berl. et Bres. — Syll. IX, pag. 896 — 4288

var. **sexseptata** Rehm, Oest. Bot. Ztschr. LVI (1906) p. 297. — Nomen nudum.

Hab. in caulinis Cerastii, Alpeiner-Alpe Stubai Austria.

3. **Pyrenophora ampla** Syd., Ann. Mycol. IV (1906) p. 343. — Pe. 4289

ritheciis sparsis, subcutaneis, tandem erumpentibus, globoso-depressis, ca. 175-220 μ . diam., ostiolo minuto, primo setulis simplicibus erectis rigidis septulatis opacis apice non dilutioribus ca. 175 μ . longis, 7 μ . latis obsessis, tandem calvescentibus, membranaceo-coriaceis, atris; ascis amplis, late ellipsoideis, brevissime stipitatis, 140-180 \times 50-65, octosporis; sporidiis irregulariter di-tristichis, oblongis, utrinque rotundatis, rectis vel leniter curvulis, transverse 10-14-septatis, longitudinaliter 2-3-septatis, ad septa constrictis, olivaceo-brunneis, tandem obscurioribus et subopacis, 52-72 \times 21-28.

Hab. in foliis petiolisque emortuis Anemones tetonensis, Big Cottonwood Canyon, Salt Lake Co., Utah Americae bor. (A. O. GARRETT).

4. **Pyrenophora Astragalorum** R. Maire, Champ. Asie Min., Bull. Soc. 4290

Sc. Nancy (1906) Extr. p. 9. — Peritheciis sparsis, primo tectis dein erumpentibus, subglobosis, apice setis rigidis, longiusculis, acutis, levibus, fuligineis, divergentibus ornatis, 200-300 μ . diam.; ascis cylindraceis v. clavatis, 80-130 \times 26-36, paraphysatis, 2-8-sporis; sporidiis distichis oblongis 34-50 \times 14-26 rarius usque ad 80 \times 28, flavo-brunneis, dein fuligineis, levibus, dense muralibus, transverse 7-9-septatis, longitudinaliter 3-septatis, ad septa omnia æqualiter constrictis.

Hab. in rachidibus putrescentibus foliorum *Astragali* sp., in M. Olympo Bithyniæ, *Astragali gummiferi*, in M. Argæ Anatoliæ.

5. **Pyrenophora Amphoricarpi** Bubák, Bull. Herb. Boiss. 2. sér. VI 4291 (1906) p. 402. — Peritheciis subæqualiter distributis, basi immersis, globosis v. supra leniter conoideo-productis, 170-190 μ . cr., nigris, parietibus 20-30 μ . cr., apice setulis subcaespitosis, nigris, septatis, rectis, 200-300 \times 4-5, præditis; contextu parenchymatico, extus nigro intus albido; ascis 100-130 \times 40-50, supra rotundatis ibique 5-9 μ . incrassatis, basi breviter pedicellatis, hyalinis, octosporis; sporidiis ovoideo-elongatis, 35-55 \times 15-20, transverse 7-9-septatis, septo medio fortiter constrictis, utrinque rotundatis, castaneo-brunneis, in asco irregulariter positis, loculo superiori plurimumque majori.

Hab. in foliis siccis *Amphoricarpi* Neumayeri M. Lovecen prope Njegus, M. Zeletin et M. Gradiste Montenegro.

6. **Pyrenophora Tetraneuris** Earle, Bull. of the New York Bot. Gard. 4292 (1904) p. 294. — Peritheciis sparsis, infossis, dein erumpentibus, obscure brunneis, non collabescensibus, circ. 200 μ . diam., ostiolo breviter papillato, setulis brunneis circumdato; ascis subcylindraceis, circ. 175 \times 35; paraphysibus filiformibus; sporidiis distichis, brunneis, ellipsoideis, obtusis, 7-septatis, non constrictis quoque loculo 1-3 septis longitudinalibus diviso, circ. 40 \times 18.

Hab. in foliis emortuis *Tetraneuris* sp., King's Cañon pr. Corson Nevada Amer. bo. (C. F. BAKER).

7. **Pyrenophora Brizæ** C. Mass. in Sacc., Ann. Mycol. (1911) p. 250. 4293 — Peritheciis erumpentibus laxe disseminatis, subcarbonaceis, glöbosis v. ovoideis 260-300 μ . diam., superne setulis rigidis extremitate pallidioribus, septatis, 200-220 \times 6-10 coronatis; ascis breviter stipitatis, cylindraceo-clavulatis, varie curvulis, 140-180 \times 32-40; paraphysibus filiformibus cito collabefactis; sporidiis octonis pallide flavis, melleis, oblongis, utrinque rotundato-obtusis, 3-septatis, lo-

culis duobus mediis v. superiore tantum longitudinaliter 1-septatis, 26-32 \approx 10-14.

Hab. in foliis emortuis *Brizæ* mediæ in M. Baldo loco Val Fredda, Ital. bor. (prof. A. GOIRAN). — *Pyrenophoræ relicinae* valde affinis sed characteribus sporidiorum, ut videtur, satis diversa.

8. **Pyrenophora filicina** J. Lind, Micromycetes from North-East Grønlandia, Kiöbenhavn (1910) pag. 157, tab. X, fig. 4. — Peritheciis sparsis, erumpenti-superficialibus, globosis, majusculis, 300 μ . diam., atris, coriaceis, superne setigeris, ostiolo brevi conico; ascis oblongo-clavatis, stipite brevi, apice rotundatis et crasse tunicatis, 8-sporis, 88-110 \approx 25; ascis paraphysibusque mox liquecentibus; sporidiis subdistichis, oblongo-ovatis, retis, transverse 5-6-septatis, medio constrictis, in longitudine 1-2-septatis, primo flavis demum fuscis et totis opacis, 28-34 \approx 15-17.

Hab. in petiolis emortuis *Cystopteridis fragilis*, Danmarks Havn Grønlandia.

PLEOMASSARIA Speg: — Syll. II p. 239, IX p. 872, XI p. 341, XVI p. 552, XVII p. 759.

1. **Pleomassaria Vandasii** Bubák, Ann. Mycol. IV (1906) p. 110. — 4295
Peritheciis subepidermicis, collo brevi papilliformi prominulis, globosis, subdepressis 300-400 μ . diam., nigris, parietibus nigranticibus, parenchymaticis, compactis, 45-70 μ . cr.; ascis elongatis vel elongato cylindraceis, stipitatis, supra rotundatis, 100-120 \approx 28-33, crasse tunicatis, hyalinis, paraphysibus tenuibus numerosis incurvatis circundatis, 4-8-sporis; sporidiis ellipsoideis v. elongatis 33-42 μ . long. supra 18-17, 5 μ . basi 11-13 μ . cr., crasse tunicatis transverse 8-10- longitudinaliter 3-septatis, medio constrictulis, e brunneo-melleo obscure brunneis, strato mucoso 2-3 μ . cr. ob-volutis.

Hab. in petiolis siccis foliorum *Astragali angustifolii*, Galicia-planina Macedonia (E. FORMANEK; comm. K. VANDAS).

2. **Pleomassaria Robiniae** Bubák, Ann. Mycol. IV (1906) p. 111. — 4296
— Peritheciis cortice immersis, solitariis v. aggregatis, plerumque breviter seriatis, apice breviter conoideo-erumpentibus, dein superiori parte prominentibus $1\frac{1}{2}$ - $3\frac{1}{4}$ mm. diam., subconoideis, 300-400 μ . altis, basi depresso-depressis, nigris, parietibus compactis extus flavescens intus fere nigris usque ad 30 μ . cr.; ascis cylindraceis, supra rotundatis basi in petiolum brevem attenuatis, 130-220 \approx 22-28, rectis v. curvulis, 4-8-sporis; paraphysibus numerosis incurvatis

multiseptatis obvolutis; sporidiis ex elongato-ellipsoideo elongato-cylindraceis 30-65 \times 17-22, transverse 5-8-longitudinaliter 1-2-septatis, ad septa plus minusve constrictis, flavo-brunneis.

Hab. in ramulis emortuis Robiniæ Pseudoacaciæ, Pátek prope Peruc, Bohemia.

3. **Pleomassaria muriformis** Kirschst., Verh. Bot. Ver. Brandenb. XLVII (1906) p. 57. — Peritheciis sparsis sub peridermio nidulantibus, prominulis, globosis, nigris, membranaceis, basi hyphis brunneis septatis præditis, $\frac{3}{4}$ mm. circ. diam.; ascis cylindraceo-clavatis, breviter pedicellatis, supra rotundatis, octosporis, 180-200 \times 24; sporidiis oblique monostichis v. irregulariter distichis, ovoideis, flavidis, transverse 12-longitudinaliter 3-4-septatis, medio constrictis, 30-35 \times 14-16; paraphysibus numerosis, filiformibus, septatis, circ. 2 μ . cr.

Hab. in ramulis dejectis Piri Mali prope Gross-Behnitz Germania.

TEICHOSPORA Fuck. — Syll. II p. 290, IX p. 899, XI p. 345, XIV p. 603, XVI p. 550, XVII p. 760.

1. **Teichospora larreiphila** Speg., An. Mus. Nac. Buenos Aires t. XIX 4298 (1909) p. 395. — Peritheciis saepius sparsis innato-superficialibus ex hemisphærico conoideis, 200-300 μ . diam., levibus, carbonaceis, grosse papillato-ostiolatis; ascis linearibus brevissime coarctato-pedicellatis, 160-200 \times 15-18, octosporis paraphysatis; sporidiis rectis monostichis late ellipsoideis transverse 5-7-longitudinaliter 1-2-septatis, fuligineis, ad septa non v. vix constrictulis, ad medium validius, 22-28 \times 12-14.

Hab. non rara ad latus internum corticis Larreeæ cuneatae viventis in montuosis Cacheuta prope Mendoza Rep. Argentina Amer. austr.

2. **Teichospora cereina** Speg., An. Mus. Nac. Buenos Aires t. XIX 4299 (1909) p. 396. — Peritheciis innato-superficialibus subcarbonaceis subglobosis 90-100 μ . diam., basi matrice leniter sordideque confusata insculptis, superne liberis, rotundatis, non papillato-ostiolatis; ascis cylindraceis brevissime pedicellatis, 70 \times 10, paraphysatis, octosporis; sporidiis oblique monostichis ellipsoideis 12-14 \times 8-9, transverse 3-septato-tordosis, septo verticali unico, fuscis.

Hab. ad lignum denudatum ramorum Cerei Spegazzinii in hortis La Plata Rep. Argentina Amer. austr.

3. **Teichospora adesmicola** Speg., An. Mus. Nac. Buenos Aires t. XIX 4300

(1909) p. 393. — Matrice sordide cinerescente, circa perithecia infuscata; peritheciis hinc inde dense pauci-gregariis, ligno denudato insidentibus minute papillato-ostiolatis, hemisphæricis, 200-300 μ . diam., carbonaceis; ascis cylindraceis breviter pedicellatis, 110-120 \times 20-25, dense filiformiter paraphysatis, octosporis; sporidiis elongato-ellipsoideis, constricto-didymis, transverse 5-7 verticaliter 1-septatis, 24-30 \times 10-12, primo lutescentibus dein olivaceis.

Hab. ad ramos emortuos Adesmia pinifoliae prope Puente del Inca, Mendoza Rep. Argentina Amer. austr.

4. *Teichospora eucalyptina* Speg., An. Mus. Nac. Buenos Aires t. XIX 4301 (1909) p. 396. — Peritheciis ligno denudato toto sordide infuscato dense gregariis basi insculptis superne liberis hemisphæricis, 150 μ . diam., minute papillulato-ostiolatis, carbonaceis; ascis subfusoideis basi crassiuscule pedicellatis, 80-85 \times 16-18, pseudopara-physatis, octosporis; sporidiis distichis, primo didymis hyalinis cribrose guttulatis, serius 5-7-septatis, septo longitudinali solitario v. duplice divisis, 20 \times 8-10, plus minnse obscure fumosis.

Hab. ad trunco cariosos Eucalypti amygdalinæ in silva Santa Catalina prope Buenos Aires Rep. Argentina Amer. austr.

5. *Teichospora Montteæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4302 (1909) p. 397. — Peritheciis in matrice infuscata sparsis subsuperficialibus, subhemisphæricis 120-150 μ . diam., carbonaceis vix papillato-ostiolatis; ascis subcylindraceis breviter pedicellatis, 60-65 \times 14-16, paraphysatis; sporidiis elongato-ovovatis didymis, loculo supero 2-septato, loculo infero valde minore 1-septato, septo longitudinali unico, 16-18 \times 6-7, fuligineis.

Hab. ad ramos emortuos Montteæ aphyllæ, Chacras de Coria prope Mendoza Rep. Argentina, Amer. austr.

6. *Teichospora upsallatensis* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 397. — Peritheciis in ramis denudatis grosse rimoso-fissis sordide cinerescenti-infuscatis sparsis v. hinc inde laxe pauci-aggregatis, papillato-ostiolatis, subglobosis 180 μ . diam.; ascis cylindraceis breviter cuneato-pedicellatis 80-100 \times 10-15, dense filiformiter paraphysatis, octosporis; sporidiis oblique monostichis subelongato-ellipsoideis, saepius 3- raro 5-septato-constrictis, olivaceis, 16-20 \times 8-9.

Hab. ad ramos emortuos Lycii crassis pini circa Upsallata nec non Larrea nitida, Cacheuta prope Mendoza Rep. Argentina Amer. austr.

7. **Teichospora Gilliesi** Speg., An. Mus. Nac. Buenos Aires t. XIX 4304

(1909) p. 394. — Matrice tota late sordideque cinerescente; peritheciis sparsis v. hinc inde laxe gregariis, levibus, lenticulari-depressis papillulato-ostiolatis 180-200 μ . diam., atris; ascis subclavatis crassiuscule tunicatis, breviter crasseque pedicellatis, 120 \times 15-16, octosporis, dense paraphysatis; sporidiis subellipsoideis oblique distichis rectis v. lenissime inaequilateralibus transverse saepius 3-septatis, longitudinaliter 1-septatis, 20-25 \times 9-10, olivaceis.

Hab. ad ramos languidos Salviæ Gilliesi in rupestribus Cacheuta prope Mendoza Rep. Argentina Amer. austr. — Species plurimæ *Melanommatum* *Teichosporarumque* sub 3-septatarum regionis præandinæ inter se summopere affines, perdifficile extriandæ, facile unius speciei polymorphæ formas tantum sistunt.

8. **Teichospora Proustiæ** Speg., An. Mus. Nac. Buenos Aires t. XIX 4305

(1909) p. 395. — Matrice late sordideque cinerescente; peritheciis subsolitariis ligno denudato insidentibus, superficialibus lenticulari-subhemisphæricis modice papillulato-ostiolatis 400-450 μ . diam., nigris, glabris; ascis linearibus, crassiuscule tunicatis, basi abrupte breviterque cuneato-pedicellatis 150-200 \times 18-20, 4-6-8-sporis, parce paraphysatis; sporidiis rectis v. oblique monostichis, 40 \times 17-18, septis transversis 7-9, longitudinaliter 1-3-divisis, e flavescenti fuligineis.

Hab. ad ramos vivos et emortuos Proustiæ ilicifoliae in præandinis Cacheuta prope Mendoza Rep. Argentina Amer. austr.

9. **Teichospora Suædæ** Speg., An. Mus. Nac. Buenos Aires t. XIX 4306

(1909) p. 397. — Peritheciis ligno denudato reticulato-rimoso insidentibus, densiuscule gregariis saepius collabescentibus e carnosulo membranaceis subglobosis 200-250 μ . diam., atris; ascis cylindraceis brevissime pedicellatis 100-110 \times 12-14, octosporis, paraphysatis; sporidiis oblique monostichis subobovatis didymis 3-septatis, loculo uno altero verticaliter diviso, ad septum medium constrictis, fumoso-olivaceis, 18-20 \times 8-9.

Hab. vulgata ad ramos aridos Suædæ divaricatae in Valle Upsallata prope Mendoza Rep. Argentina Amer. austr. *

10. **Teichospora dispersa** (Kirschst.) Sacc. et Trott. *Strickeria dispersa* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) p. 55.

— Peritheciis sparsis, nigris, coriacellis, rugulosis, globosis, ostiolo brevi prominenti præditis, primum immersis, demum ligno nudo insidentibus, 300-400 μ . diam.; ascis cylindraceis, brevissime pedicellatis, supra rotundatis, octosporis, 100-140 \times 14-18; sporidiis

oblique mono- v. irregulärer distichis, oblongis, medio parum constrictis, transverse 5-7(plerumque 6)-septatis et longitudinaliter muraliter 2-3-septatis, flavo-melleis, dein obscure brunneis, 20-30 (plérumque 22) \approx 10-12; paraphysibus filiformibus, hyalinis.

Hab. in ligno quercino decorticato in silvis prope Rathenow Germaniaæ.

11. **Teichospora præclara** Rehm, Ann. Mycol. IV (1906) p. 336. — 4308
Peritheciis dispersis, basi cortice subinnatis, demum sessilibus, globulosis, atris, scabriusculis brevissime papillulatis, poro perspicuo haud pertusis, 0,3-0,7 mm. diam. excipulo extus subfuscō, intus hyalino, crasso, non carbonaceo; ascis clavatis, apice rotundatis, 250 \approx 30 octosporis; sporidiis fusoideis, rectis, primitus hyalinis, dein flavido-fuscis ab initio 3-septatis, interdum medio paullulum constrictis, demum transverse 7-11-septatis, longitudinaliter 2-3-septatis, cellulis guttis oleosis magnis repletis, 60-65 \approx 15-18 distichis; paraphysibus plurimis, arctejuxta positis, filiformibus, septatis, hyalinis.

Hab. ad corticem adhuc pendulum Ostryæ virginicæ, Lyndonville U. St. Am. (Dr. FAIRMAN). — *Teichosporæ principi* proxima, differt sporidiis longioribus et crebrius septatis.

12. **Teichospora ?andina** Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 394. — *Maculis nullis; substrato toto arescenti-cinerescente; peritheciis solitariis vel pauci-gregariis erumpentibus subconoideis, carbonaceis 150-180 μ . diam.; ascis cylindraceo-ellipsoideis brevissime pedicellatis 50-60 \approx 20-24, octosporis, a paraphysatis; sporidiis distichis ellipsoideo-elongatis 3-septatis, loculo medio supero saepius longitudinaliter diviso leniterque tumidiore, oliveaceis, 22-25 \approx 8-10.*

Hab. ad ramulos emortuos Ephedræ andinæ in Cerro Pgado circa Mendoza Rep. Argentina Amer. austr. — *Cucurbitariae Ephedræ* Tassi affinis, peritheciorum fabrica, ascis crassioribus brevioribusque a paraphysatis recedens.

13. **Teichospora marina** Roll., Bull. Soc. Mycol. Fr. (1905) p. 27. — 4310
Peritheciis 0,3 mm. diam., globosis, papillatis, atro-nitidis, coriaceis, per fibras ligneas atro-inquinatas erumpentibus; ascis tereti-clavatis, apice rotundatis et in stipitem longiusculum basi globo-so-tumidulum desinentibus, 120-140 \approx 10-13, filiformi-paraphysatis, octosporis; sporidiis monostichis, ovoideis, crasse 3-septatis, constrictisque, et longitudinaliter hinc inde 1-septatis, guttatis, flavis, 14-17 \approx 6-8.

Hab. in caulis emortuis Urgineæ Scillæ (vulgo *Ceba marina*), Como Negra in insulis Balearibus. — *Var. Euphorbiæ* Roll., l. c. — A typo imprimis differt ascorum pedicello basi non inflato. — In caulis emortuis Euphorbiæ dendroidis, Como Negra in insul. Balearibus.

Subgen. Strickeria Körb. em. Sacc.

14. **Teichospora larreicola** (Speg.) Sacc. et Trott., *Strickeria larrei-* 4311
cola Speg., An. Mus Nac. Buenos Aires t. XIX (1909) p. 393. —
 Matrice tota late cinerescente; peritheciis sparsis v. gregariis, undis lenticularibus, siccis eximie cupulato-collabescentibus 150-250 μ . diam., atris, coriacellis; ascis linearibus basi abrupte breviter crasseque pedicellatis 90-110 \times 14-16, octosporis parce paraphysatis; sporidiis oblique monostichis, ellipsoideo-ob lanceolatis transverse 3- longitudinaliter 1-septatis, 18-20 \times 7-8 olivaceo-virescentibus.

Hab. ad ramos cariosos denudatos Larreae nitidae in præandinis Cacheuta prope Mendoza Rep. Argentina Amer. austr.

15. **Teichospora variispora** (Kirschst.) Sacc. et Trott. *Strickeria va-* 4312
riispora Kirschst., Verh. bot. Ver. Brandenb. XLVIII (1906) p. 55. — Peritheciis sparsis v. confertis, superficialibus, nigricantibus, obtusis, coriaceis, globoso-depressis, breviter papillato-umbilicatis, 300-400 μ . diam., subsuperficialibus; ascis cylindraceis, crasse tunicatis, breviter pedicellatis, supra rotundatis; octosporis, 120-150 \times 11-14; sporidiis oblique monostichis, primum hyalinis, dein brunneolis demumque obscure brunneis, oblongo-fusoideis, medio fortiter constrictis, primum 3- demum usque ad 7-septatis et 1 v. 2 longitudinaliter sed imperfecte septatis, 20-26 \times 9-10; paraphysibus numerosis, filiformibus, hyalinis, ramosis, septatis, quandoque supra globoso-incrassatis.

Hab. in ligno denudato Rhamni Frangulae prope Rathenow Germaniae.

16. **Teichospora Mate** (Speg.) Sacc. et Trott. *Strickeria Mate* Speg., 4313
 An. Mus. Nac. Buenos Aires t. XVII (1908) p. 127. — Peritheciis subhemisphæricis sparsis v. sæpe subseriatibus 150-180 μ . diam. per ætatem sæpe subcollabescentibus vix papillato-ostiolatis, basi leniter matrice infuscata insculptis, non v. vix subiculigeris; ascis cylindraceis brevissime pedicellatis, octosporis, 90-100 \times 9-10, paraphysibus filiformibus densis obvallatis; sporidiis elongato-ellipsoideis non v. vix subobovatis, 3-septatis, leniter constrictis, lo-

culis duobus internis quandoque septo longitudinali divisis, olivaceis, 13-19 \times 7-8.

Hab. in superficie interna truncorum cariosorum Ilicis paraguariensis (vulgo Mate) in silva secus Matto Queimado Rep. Argentinæ Amer. austr. — Memorana ascorum Jodi ope leniter cærulescit.

17. **Teichospora fodiens** Larst. et Malbr. in Le Breton et Riel in 4314 Bull. Soc. Amis S. N. Rouen (1893) p. 154, t. I, f. 5 (extr.). — Peritheciis confertis v. aggregatis, ligno adnatis corticeaque initio velatis, dein eo secidente liberis, sphæroideis v. mutua pressione difformibus, rarius papillatis, dein poro pertusis, non collabescitibus, atris, opacis, levibus, circ. 300 μ . diam.; ascis crasse cylindraceis, brevissime noduloso-stipitatis, octosporis, paraphysatis; sporidiis oblique monostichis, ellipsoideo-oblongis, 3-septatis ad septa levissime constrictis, 18-21 \times 6-6,5, loculo secundo subinde quoque tertio septulo long. diviso, dilute luteolis.

Hab. ad ramulos aridos Salicis sp. pr. Quevilly pr. Rouen Galliae (Reliq. ab. LETENDRE).

18. **Teichospora trabicola** Fuck. — Syll. II, p. 292. — ***T. Notarisii** 4315 Sacc. et Trav. in Saccardo, Not. Myc. VI, Ann. Mycol. III (1905) p. 511. — Peritheciis sparsis v. approximatis e basi adnata superficialibus, globulosis, $\frac{1}{4}$ mm. demum collabescendo leviter concavis, levibus, nigris, carbonaceis, ostiolo minute papillato, perforato; ascis tereti-clavatis, breve crassiuscule stipitatis, octosporis, filiformi-paraphysatis, 50-70 \times 13-14; sporidiis monostichis v. imperfecte distichis, oblongo-ovoideis, utrinque rotundatis, constricto 3-septatis, loculis 1-2 longitrorsum partitis, fusco-olivascentibus.

Hab. in ligno quercino putri, Mediolani Ital. bor. (DE NOTARIS herb. c. icon. in Instituto bot. romano). — A typo differt peritheciis demum collabenti-depressis, sporidiis paullo longioribus, ascis paullo brevioribus et crassioribus.

PLEOSPHÆRIA Speg. — Syll. II p. 304, IX p. 910, XI p. 347, XIV p. 606, XVII p. 763.

1. **Pleosphaeria silvicola** v. Höhn, Fragm. z. Mykol. Sitzb. k. Ak. d. 4316 Wiss. Wien Bd. CXVI, Abt. I (1907) p. 122. — Peritheciis globosis, superficialibus, nigris, tenuiter membranaceo-carbonaceis, sparsis, 200-260 μ . diam., setulis nigris, acutis, rigidis, non v. indistincte septatis 40-70 \times 4 obsitis; paraphysibus paucis; ascis cylindraceis v. clavatis, octosporis, 100 \times 10-16; sporidiis monostichis v. sub-

distichis, ellipsoideis utrinque subangustatis rotundatisque brunneo-olivaceis, transverse 5-8-septatis, 1-2-longitudinaliter sed incomplete septatis, 17-20 \times 8-9.

Hab. in ligno fagineo putri prope Pressbaum Austriae inf.

- *P. quercinae* Pat. et *P. pulverulæ* Mouton affinis.

2. **Pleosphaeria Fairmaniana** Saccardo, New Fungi New Y., in Journ. 4317 of Myc. XIII (1907) p. 45. — Peritheciis laxe gregariis v. subsparsis, superficialibus, globosis, nigris, membranaceo-carbonaceis, 250-280 μ . diam., vertice rotundatis, non papillatis, utique laxe setulosis; setulis filiformibus, obtusulis, indistincte septulatis, fuligineis, 85-100 \times 5-6, in fasciculos rigidulos junctis; ascis cylindraceis, octosporis, 100-120 \times 12, indistincte paraphysatis; sporidiis oblique monostichis, oblongo-ovoideis, sursum crassioribus, 3-septatis (rarius 4-septatis), medio constrictis, parce muriformibus, 19-23 \times 7,5-9, olivaceo-fuscis.

Hab. in ligno carioso indurato Ulmi americanæ, Lyndonville, New York (C. E. FAIRMAN). — Praecipue *Pleosph. quercinæ* Pat. boreali-africanæ affinis, a qua differt ascis cylindraceis nec clavatis, setulis peritheciæ fasciculatis, etc.

3. **Pleosphaeria malacoderma** v. Höhnel, Fragm. z. Mykol., Sitzb. k. 4318 Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) pag. 121. — Peritheciis superficialibus, gregariis, globosis, nigris, 140-200 μ . diam., membrana tenuissima, pellucide nigrescenti, fumoso-grisea, parenchymatica, basi hyphis pallide brunneis, septatis, 2 μ . cr. præditis, ceterum setulis nigris, unilocularibus, acutis, 45-60 \times 2-5; ascis a paraphysatis, parcis, forma variabilibus, plerumque irregulariter clavato-ovoideis, basi stipitiformi angustatis, 55-66 \times 26-29 octosporis; sporidiis confertis, olivaceis demum griseo-brunneolis, pellucidis, uno latere rotundato-angulosis, altero ovoideis, multilocularibus, 7-9 transverse septatis et nonnullis septis longitudinalibus præditis, 16-18 \times 10-12.

Hab. in Polyporo noduloso, Wienerwalde Austriae inferioris.

4. **Pleosphaeria Möllerielæ** (Rick) Sacc. et Trott., *Acanthostigma Möllerielæ* Rick, Broteria V (1906) p. 45. — Peritheciis superficialibus, in stromate *Möllerielæ* gregariis, 50-100 μ . diam., sphaericis; spinulis usque ad 20 μ . longis; ascis primo oblongo-ovalibus, dein orbiformibus, breviter pedicellatis parte sporifera 40 \times 10, octosporis; sporidiis conglobatis, multiserialibus, primitus hyalinis, dein flavo-brunneis, cylindricis, 3-4-septatis, uno septo longitudinali-

nali muriformibus, 12 ~ 6; paraphysibus filiformibus, ascum obtengentibus et incurvatis, 1-2 μ . latis.

Hab. parasitica in stromate *Möllerielæ nutantis* Rick, Rio Grande do Sul Brasilæ. — Ob sporidia muriformia non *Acanthostigma* sed potius *Pleosphaeria*.

CUCURBITARIA Gray — Syll. II p. 307, IX p. 915, XI p. 343, XIV p. 607, XVII p. 764.

1. **Cucurbitaria erratica** Peck, Bull. Torr. Bot. Club XXXIV (1907) 4320 p. 349. — Peritheciis cæspitosis, subglobosis, plus minusve pilosis, nigris, in cortice immersis cæspitulos orbiculares v. oblongos efformantibus, mox erumpentibus et epidermide erupta cinctis; ascis cylindraceis, 200 ~ 20-22; sporidiis plerumque monostichis, oblongis, coloratis, 5-7-septatis, 1-3 loculis longitudinaliter divisis, medio constrictis, 30-40 ~ 15-20, medietate basali sporarum magis angustiore quam altera; paraphysibus nullis.

Hab. in ramis siccis *Æsculi glabrae*, Oberlin Ohio Amer. bor. (F. O. GROVER). — Differt a ceteris spec. gen. *Cucurbitaria* peritheciis pilosis et paraphysibus nullis. hinc rectius genus novum (*Peckiomycetes*).

2. **Cucurbitaria Pteleæ** Hollós, Ann. Mus. Nat. Hung. IV (1906) 4321 p. 331. — Peritheciis stromate nigro-brunneo insidentibus, erumpenti-superficialibus, dense gregariis, depresso-globosis, brunneo-nigris, granuloso-corrugatis, c. 0,5 mm. diam., ostiolo minuto papillato umbilicato; ascis cylindraceis, apice rotundatis, breviter stipitatis, 6-8-sporis, 200-245 ~ 14; paraphysibus filiformibus; sporidiis monostichis, oblongo-ellipsoideis, transverse 3-5-septatis, medio constrictis, loculo uno v. altero, rarius omnibus longitudinaliter divisis, olivaceis 20-32 ~ 10-12.

Hab. in ramis siccis *Pteleæ trifoliatae*, Nagy-Körös Hungariae.

3. **Cucurbitaria adesmicola** Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) 4322 p. 398. — Ramis infectis immutatis corticatis; peritheciis peridermio innatis per epidermidem erumpentibus constipatis globosis, 150-250 μ . diam., papillato-ostiolatis, carbonaceis; ascis subcylindraceis deorsum sensim cuneato-pedicellatis, 110-135 ~ 20, parce paraphysatis, octosporis; sporidiis subdistichis v. oblique monostichis, ellipsoideis, 3-5-septato-constrictis, 25-26 ~ 12, septo longitudinali fere semper donatis.

Hab. ad ramos languidos v. emortuos *Adesmia pinifoliae*

in summis montibus Cacheuta prope Mendoza Rep. Argentina Amer. austr.

4. **Cucurbitaria Piceæ** Borthwick in Notes Roy. Bot. Gard. Edinburgh, XX (1909) p. 259, tab. 50. — Mycelio intercellulari; peritheciis arcte gregariis globoso-ovatis, obtusis, in stromate effuso breve crasseque stipitatis, carbonaceis, nigris; excipulo pseudo-parenchymatico extus denso, nigro, intus spongioso brunneo; ascis clavato-cylindraceis, filiformi-paraphysatis, 4-6-sporis; sporidiis monostichis, cymbiformibus, 4-10-septato-muriformibus, atro-brunneis, 20×6 .

Hab. in gemmis, quas maxime vexat, Abietis (Piceæ) pungentis cultæ in horto botanico Edinburgh Scotiæ. — Cum *Cucurbitaria pityophila* comparanda, quæ imprimis sporidiis parcior septatis differre videtur.

Sect. 10. Scolecosporæ.

CEUTHOCARPON Karst. — Syll. II p. 157, XIV p. 618, XVI p. 557.

1. **Ceuthocarpon sphærelloides** Rehm, Ann. Mycol. VI (1908) p. 322. 4324
— Peritheciis in maculis denigratis, suborbicularibus, 2-3 mm. lati, epiphyllis gregariis, innato-prominentibus, globosis, nigris, ostiolo vix conspicuo, contextu parenchymatico fusco, 0,15-0,2 mm. diam.; ascis cylindraceis, apice rotundatis, octosporis, $75-90 \times 8-9$; sporidiis filiformibus, rectis vel subcurvatis, hyalinis, 3-septatis, $45-50 \times 2,5$, parallele positis; paraphysibus nullis.

Hab. ad folia Rosæ in horto, Rathen prope Königstein a. Elbe Germaniæ (W. KRIEGER). — Stromatis et ostioli defectu a gen. *Linospora* distinguendum.

OPIOSPHÆRIA Kirschst., Verh. Bot. Ver. Brandenburg. XLVIII (1906)

p. 47 (Etym. *ophis* anguis et *sphæria* ob sporidia filiformia). — Perithecia libera, parva, parum elongata, subglobosa, tenui-membranacea, griseo-nigra, plerumque in greges late effusos aggregata, supra pilis firmis tecta. Asci tenui-tunicatis, cylindracei, supra rotundati, octospori. Sporidia filiformia guttulata unilocularia. — A *Niesslia* differt sporidiis filiformibus unilocularibus.

1. **Ophiophæria tenella** Kirschst. l. c. p. 47, cum icon. — Peritheciis laxe insidentibus, parvis, setulis 200×5 ; ostiolo indistincto;

ascis cylindraceis, sessilibus, octosporis, 130-160 \times 7-9; sporidiis inter se spiraliter connexis, hyalinis 1,5-2 μ . cr. primum guttulatis; paraphysibus filiformibus hyalinis.

Hab. in foliis putrescentibus *Glyceriae spectabilis* et *Caricis ripariae*, prope Gross-Behnitz et Rathenow Germaniae.

OPHIOSPHÆRELLA Speg., An. Mus. Nac. Buenos Aires, t. XIX (1909) p. 401 (Etym. *ophis* anguis quasi *Sphaerella* scolecospora). — Perithecia innata, globoso-lenticularia, minuta, submembranacea, poro pertusa. Asci aparaphysati, octospori. Sporidia filiformia, hyalina v. chlorina ascum subæquantia. — Est *Sphaerella* scolecospora.

1. **Ophiosphærella graminicola** Speg., An. Mus. Nac. Buenos Aires 4326 t. XIX (1909) pag. 401, cum icon. — Maculis nullis sed matrice tota arescenti-pallescente; peritheciis parenchymate innatis laxe gregariis submembranaceis, lenticularibus 180-200 μ . diam.; ascis cylindraceis utrinque leniter attenuatis basi brevissime cuneato-pedicellatis, 150 \times 10, aparaphysatis, octosporis; sporidiis filiformibus rectis, multiguttulatis, chlorinis, 140 \times 3.

Hab. ad vaginas aridas *Leptochloæ virgatae* in hortis pr. Tucumán, Rep. Argentina Amer. austr.

PHYSALOSPORELLA Speg., Fungi Chilenses (1910) pag. 35 (Etym. demin. a *Physalospora*). — Perithecia macula stromatica determinata setulifera immersa, pauci-gregaria, minuta; asci cylindracei octospori, paraphysati; sporidia subacicularia, continua, hyalina.

1. **Physalospora chilensis** Speg., l. c. cum icon. — Stromatibus 4327 primo setuliferis dein glabratris, minutis amphigenis; peritheciis saepius vix prominulis amphigenis 120-150 μ . diam.; ascis subcylindraceis 75-80 \times 6-7, octosporis; paraphysibus frequenter furcatis; sporidiis subbacillaribus utrinque angustatis, minute guttulatis, 18-20 \times 2,5-3.

Hab. in foliis dejectis putrescentibus præcipue *Persæ Lin-* *gue*, Cerro Caracol de Concepcion Chile, Amer. austr.

ACERBIA Sacc. — Syll. XI p. 353, XIV p. 619, XVII p. 768.

1. **Acerbia botryosa** Rehm, Ann. Mycol. VII (1909) p. 537. — Pe- 4328 ritheciis in soros orbiculares 3-5 mm. diam., demum confluentibus arcte congregatis, sessilibus, globosis, in rostrum breviter conoides, obtusum abeuntibus, glabris, ad basim hyphis fuscis, septatis, longis, 5 μ . pr. obsessis, carbonaceis, 0,3 mm. diam., fusco-atris,

verruculosis; ascis tenerrimis, cylindraceo-fusoideis, 80-90 \times 7, 4-sporis, I.-; sporidiis filiformibus, utrinque acutatis, rectis, pluriguttulatis, hyalinis, usque ad 65 \times 2, parallele positis; paraphysibus tenerrimis, ramulosis.

Hab. ad ramulum? Sao Leopoldo Rio Grande do Sul Brasiliæ (THEISSEN S. J.) — Gen. *Ophiocerati* proxima sed rostro parvo diversa; an potius ad *Leptosporellam* pertineat incertum. Forsan in nov. gen. erigenda, cui nomen *Scolecobotrys* cl. Rehm proponit.

ACERBIELLA Sacc. — Syll. XVII p. 768.

1. *Acerbiella aquilæformis* Rehm, Ann. Mycol. V (1907) p. 529. — 4329

Peritheciis gregariis, late sessilibus, globulosis, apice truncatis, saepe orbiculariter circumscriptis, planis, medio in papillulam conoideam brevem, poro pertusam abeuntibus, 1-2,5 mm. diam., crasse carbonaceis, in parte inferiore usque ad planitiem superiorem fusco-atris, hyphis plerumque rectis, parallelis, septatis, subfuscis, prælongis, 3 μ . cr., saepe in fasciculos 50 μ . crassos coalitis obssessis, inde tegumento subfuscō mycelii instar conjunctis, parte superiore peritheciī plerumque applanata, rarius convexula, aterrimis, glabris; ascis fusiformi-cylindraceis, longe stipitatis 600 \times 12, tetrasporis, apice rotundatis incrassatisque; sporidiis filiformibus, obtusis, pluries septatis, quaque cellula guttulis 2 oleosis prædita, fuscidulis, c. 300 \times 4, in asco parallele spiraliter circumvolutis; paraphysibus filiformibus, hyalinis, septatis, 3-4 μ . cr.

Hab. ad truncos, Sao Leopoldo, Rio Grande do Sul, Brasiliæ (RICK). — Habitus omnino *Roselliniae aquilæ* sed fructificatio prorsus aliena. *Acerbiella macrospora* partibus omnibus minoribus mox recedit.

2. *Acerbiella violacea* (Racib.) Sacc. et Trott., *Acanthostigma violaceum* Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 385. — 4330

Plagulis hypophyllis violaceis 0,5-1,5 cm. latis; hyphis violaceo-brunneis, multiseptatis, ramosis, 1,5-2,5 μ . cr., hyphopodiis v. setulis nullis; peritheciis numerosissimis, globosis, sessilibus, 220-260 μ . diam., minute papillato-ostiolatis, pilis violaceo-cupreis, deflexis 50-80 μ . long. tectis; parietibus tenuibus, brunneis, mollibus; paraphysibus filiformibus; ascis cylindraceis, octosporis, 74-80 \times 9-11; sporidiis subparallelis, linearibus, obscure nigris, multiseptatis, 50-60 \times 1,5.

Hab. parasitice in plagulis Meliolarum ad folia Jambosæ sp. Djasingo prope Buitenzorg Java. — Ob sporidia prælonga et

nigricantia ab *Acanthostigmate* omnino recedit; potius *Acerbiella* proxima

BOMBARDIELLA v. Höhn. Fragm. Myk. VIII (1909) in Sitzb. k.

Ak. d. Wiss. Wien CXVIII, Abt. I, p. 1192 (Etym. a gen. *Bombardia*, cui affinis). — Perithecia plerumque gregatim effusa in hypostromate tenui, pallido, superficiali insidentia, nigra, glabra, mollia, carnosso-membranacea, late ostiolata; pariete peritheciis crasso tristratioso, strato medio hyalino, ceteris obscuris, parenchymaticis; asci octospori cylindracei, tenuiter tunicati; paraphysibus filiformibus; sporidia hyalina, filiformia, plurilocularia.

1. **Bombardiella cæspitosa** v. Höhn., l. c. pag. 1192. — Peritheciis 4331 pauci-gregariis, plerumque longitudinaliter dispositis, hypothallo molli pallido minute celluloso plectenchymatico, 20-30 μ . cr., carnosso-membranaceis, levibus, glabris, globosis, subpatelloideis, 400-450 μ . latis et altis, pariete peritheciis basi 35-60 μ . cr. apicem versus usque ad 130 μ . cr., ostiolo 45-52 μ . lato aperto, tristratioso; paraphysibus numerosis, tenuiter tunicatis, non septatis, minute guttulatis, 3-6 μ . cr., laxis; ascis cylindraceo-clavatis, supra rotundatis, tenuiter tunicatis, basim versus conoideo-angustatis, 136-170 \times 12-16, octosporis; sporidiis parallelis, cylindraceo-filiformibus utrinque angustato-acutatis, supra saepe paullo latioribus, contentu nitido homogeneo, 14-15-septatis, hyalinis v. flavidulis, 120-124 \times 3,5-4,5.

Hab. in ramis putrescentibus *Amomi* sp. in silvis Tjibodas ins. Java.

LEPTOSPORA Fuck. — Sacc. Syll. II p. 198 (ut subgen.).

1. **Leptospora stictochætophora** Fairm., Proc. Rochester Ac. of Sc. 4382 IV (1906) p. 218, tab. XX, fig. 5-6. — Peritheciis sparsis vel gregariis, parvis, setulis obsitis, primum pallide brunneis dein obscurioribus; setulis acutis, canaliculatis, subcompositis, 150-250 \times 7-13; ascis late fusideo-oblongis, octosporis, breviter stipitatis, 80-90 \times 10-13; paraphysibus vix distinctis, albis; sporidiis irregulariter distichis, rectis v. curvis, cylindraceis v. allantoideis, utrinque rotundatis, guttula magna oblongo-ellipsoidea praeditis, hyalinis, 20-27 \times 4-6.

Hab. ad ramos decorticatos *Aceris* sp., Lyndonville New York Amer. bor.

2. **Leptospora sparsa** Sacc. et Fairm. in Saccardo, Microm. Amer. 4383

novi, Journ. of Myc. v. XII (1906) p. 49. — Peritheciis superficialibus, sparsis, globulosis, carbonaceis, nigris, glabris, 300-400 μ . diam., breviter obtusule papillatis; ascis elongato-cylindraceis basi sensim tenuato-substipitatis, 112-120 \times 8-9, octosporis, apice paullulum tenuatis rotundatisque; sporidiis distichis, cylindraceis, sursum curvatis, 33 \times 4, continuis, hyalinis, eguttulatis.

Hab. ad ligna putrida in silvis pr. Lyndonville, New York Amer. bor. — Peritheciis laxe sparsis, glabris, minoribus, non pa-chydermaticis, sporidiis non nucleatis etc., a *Lept. spermoide* aliis que distinguenda species.

3. *Leptospora spermoidea* (Hoffm.) Fuck. — Syll. II, p. 198 (*Lasio-sphaeria*) — var. *rugulosa* Bres. in Rick, Fungi austro-amer. II, Ann. Myc. v. III (1905) p. 17, Broteria V (1906) p. 45; Exsic. n. 41. — A typo differt peritheciis grosse rugulosis, ascis fusoides et sporidiis demum olivaceis, 1-3-septatis.

Hab. ad ligna in Brasilia.

Appendix: Sphaeriaceæ fossiles.

- Sphaerites Buxi* (Engelh.) Sacc. et Trott, *Sphaeria Buxi* Engelh. 4335 Abhandl. Senckenb. nat. Ges. XXIX (1908).

Hab. in pliocæne super. in Germania.

- Sphaerites carbonarius* Schuster, Geogr. Jahreshefte, XX (1907). 4336

Hab. ad folia Cordaitis borassifolii in formatione carbonifera in Germania.

Fam. 3. Ceratostomataceæ WINT.

Sect. 1. Hyalosporæ.

- CERATOSTOMELLA** Sacc. — Syll. I p. 408, IX p. 573, XI p. 289, XIV p. 515, XVII p. 609. — Comparandæ sunt inter se species a cl. Münch ex Germania et a cl. Hedgpok ex America descriptæ.

1. *Ceratostomella Pini* Münch, Naturw. Ztsch. f. Land. u. Forst- 4337 wirtsch. V (1907) p. 531, cum icon. — Peritheciis subcorticis et ex ligno decorticato cyaneo-colorato erumpentibus, 70-100 μ . diam., levibus, rostelllo longo præditis; ascis globosis denique ex ostiolo fimbriato in massulas eructatis, continuis, 5 \times 1,5, curvulis, hyalinis.

Hab. in ligno cyaneo colorato pineo in Germania. — Status conidiophorus adest et *Cladosporii* spec. sistit: hyphis 20-50 fasciculatis, conidia hyalina continua 4-5 \times 1,5 gerentibus. Species hæc *Ceratostomellæ* nec non sequentes a Cl. Münch descriptæ et ex cultura eductæ, ex *Cerat. pilifera* (Fries) Fuck. sensu lato oriuntur.

2. **Ceratostomella Piceæ** Münch, Naturw. Ztschr. f. Land. u. Forst- 4338 wirtsch. V (1907) p. 531, cum icon. — Peritheciis nigris, carbonaceis, globosis, subdepressis, quandoque leniter pilosis, 160-240 μ . diam. et rostelllo 0,8-1,2 mm. longo, 20-30 μ . cr., irregulariter incurvato præditis; sporidiis ex rostelli apice fimbriato 20-50 μ . long., in massulas mucosas congregatis, cylindraceis utrinque rotundatis leviter curvulis, hyalinis, 3,5-4,5 \times 1,5-2; ascis 5-6 μ . latis.

Hab. in ligno abietino putri, in Germania. — Socius adest status conidicus *Graphium* sistens (capitulo conidia 3,5-4 \times 1,7 hyalina exerente) nec non *Cladosporii* forma fasciculata, conidia 6-8 μ . longa gerens.

3. **Ceratostomella cana** Münch, Naturw. Ztschr. f. Land. u. Forst- 4339 wirtsch. V (1907) p. 531, cum icon. — Peritheciis circ. 1 mm. long., 0,5 mm. crassis; statu conidico (*Graphium*) ab illo *Cerat. Piceæ* diverso.

Hab. in ligno pineo putri quod cyaneum reddit, in Lothringia.

4. **Ceratostomella cærulea** Münch, Naturw. Ztschr. f. Land. u. Forst- 4340 wirtsch. V (1907) p. 531, cum icon. — Peritheciis ut in *C. Piceæ* sed mycelium et status conidiales diversa; hyphis mycelialibus mox obscuris, forma *Graphii* nulla, sed *Cladosporii* conidia 15-20 \times 3-3,5 μ . conidia spicata.

Hab. in ligno pineo putri, quod cyaneum reddit, in Germania.

5. **Ceratostomella cyclospora** Kirschst., Verh. Bot. Ver. Brandenb. 4341 XLVIII (1906) p. 52. — Peritheciis solitariis v. congregatis in ligno denudato v. in cortice immersis, nigris, globosis, carbonaceis, granuloso-rugulosis, usque ad 1 mm. diam., rostelllo elongato sèpe tuberculoso et ostiolo umbilicato-depresso prædicto; ascis cylindraceo-clavatis, tenuato-pedicellatis, crasse tunicatis, fragilibus, 30-40 \times 4-6, facile diffluentibus, octosporis; sporidiis monostichis v. irregulariter dispositis, hyalinis, cylindraceis, semilunatis v. plerumque fere circulariter incurvatis, circ. 4 μ . diam.; paraphysibus numerosis, ascos longe superantibus, filiformibus, hyalinis, 2 μ . crassis.

Hab. in ligno pineo putri in silvis prope Rathenow, Germania.

6. **Ceratostomella Schrenkiana** Hedgcock, 17th Ann. Rep. Miss. bot. 4342

Gard. St. Louis (1906) p. 67, cum icon. et tab. 3, fig. 6, tab. 4, fig. 1-4. — Peritheciis sphæricis, nigris 120-200 μ . diam., ostiolo rostellato glabro 0,8-1,2 mm. longo, 10-25 μ . diam., apice setulis brevibus 10-15 \times 2 hyalinis divergentibus coronato; ascis . . . ; sporidiis ellipsoideis sæpe curvulis utrinque acutiusculis 2,5-4 \times 1-1,5, hyalinis; conidiis in formam *Cephalosporii* digestis, ovato-cylindraceis, hyalinis, 5-7.

Hab. in ligno, quod cyaneo tingit, Pini echinatae, Missouri et Arkansas Amer. bor. — Mycelium peculiare dendroideo-ramosum. Cfr. ejus ic. loc. cit. p. 68. — Ab affini *C. echinella* differt peritheciis superficialibus et apice non glanduloso-pubescentibus

7. **Ceratostomella capillifera** Hedgcock, 17th Ann. Rep. Miss. bot. 4343

Gard. St. Louis (1906) p. 71, pl. 3, fig. 1, pl. 6, fig. 2. — Peritheciis sphæroideis, nigris, longe rostellatis et filamento hyalino undulato terminatis, basi hyphis v. pilis obscure brunneis tecta, 200 μ . circ. diam., rostello 1,5 mm. longo, 25 μ . cr., setulis terminalibus longis et angustis, 80 \times 1; ascis . . . ; sporidiis ex ellipsoideo reniformibus 4,5 \times 1,5; conidiis in formam *Cephalosporii* digestis, 6-8 \times 1,5-2, hyalinis.

Hab. in ligno, quod cyaneo tingit, Liquidambaris styraeifluæ in Amer. bor. — Ab affini *Cerat. pilifera* differt longitudine rostelli, forma et magnitudine conidiorum sporidiorumque.

8. **Ceratostomella pluriannulata** Hedgcock, 17th Ann. Rep. Miss. bot. 4344

Gard. St. Louis (1906) p. 72, pl. 3, fig. 7, pl. 5, fig. 1-2. — Peritheciis ligno v. mycelio superficialibus, globosis 90-200 μ . diam., plerumque circ. 120 μ ., rostello 0,9-2 mm. longo, 10-30 μ . cr., plerumque 1,5 mm. longo, 25 μ . cr.; setulis terminalibus attenuatis 20 \times 2; ascis . . . ; sporidiis reniformibus, hyalinis, 4-5 \times 1,5-1,7, plerumque 4,5 \times 1,5; conidiis in formam *Cephalosporii* digestis, 5-8 \times 2-3, hyalinis.

Hab. in ligno, quod cyaneo tingit, Quercus rubræ, Mississippi Amer. bor. (PEER. SPAULDING). — Rostella apice regulariter fimbriata sed sæpe anulo altero setularum v. duobus a primo plus minus remotis praedita. Ab affini *Cer. pilifera* differt sporidiis minoribus et rostello plurianulato.

9. **Ceratostomella minor** Hedgcock, 17th Ann. Rep. Miss. bot. Gard. 4345

St. Louis (1906) p. 74, pl. 3, fig. 4, pl. 5, fig. 6-7. — Peritheciis

sphæroideis, nigris, rugosis, 40-70 μ . diam., plerumque 52 μ ., rostello 120-160 μ . longo, plerumque 135 μ ., 6-12 μ . cr., apice setulis brevibus crassiusculis prædicto; ascis e rotundato ovoideis, hyalinis, octosporis; sporidiis in duas tetrades dispositis 3,1-4,2 \approx 0,9-1,9, plerumque 3,5 \approx 1,5, hyalinis; conidiis in formam *Cephalosporii* digestis, ovoideo-oblongis, hyalinis, 4,5 \approx 2.

Hab. in ligno quod cyaneo tingit in *Pini arizonicæ*, Amer. bor. (A. D. HOPKINS). — *Cer. exiguae* affinis sed compluribus notis diversa.

10. **Ceratostomella exigua** Hedgcock, 17th Ann. Rep. Miss. bot. Gard. 4346 St. Louis (1906) p. 76, pl. 3, fig. 2, pl. 6, fig. 4-7. — Peritheciis globosis, nigris, fragilibus, rugulosis, 60-80 μ . diam., plerumque 73 μ ., rostello 150-200 μ . longo, 8-18 μ . cr., plerumque 180 \approx 14, apice setulis brevibus angustis prædicto; ascis hyalinis irregulariter ex ovoideo ellipsoideis, octosporis; sporidiis sæpe in duas tetrades dispositis, hyalinis, ellipsoideis, quandoque curvulis 2,1-2,8 \approx 0,8-1,1, plerumque 2,5 \approx 1; conidiis in formam fere *Cephalosporii* digestis, hyalinis, 3,5-4,5 \approx 1,6-2,2.

Hab. in ligno, quod cyaneo tingit, *Pini virginianæ* in Amer. bor. (A. D. HOPKINS). — Ab affini *C. microspora* E. et E. differt forma sporidiorum, magnitudine peritheciorum et rostelli. A *C. minore* differt peritheciis majoribus, nec non numero, forma et magnitudine setularum.

11. **Ceratostomella moniliformis** Hedgecock, 17th Ann. Rep. Miss. bot. Gard. St. Louis (1906) p. 78, pl. 3, fig. 5, pl. 5, fig. 3-4. — Peritheciis e brunneo nigris, 90-180 μ . diam., spinulis conoideis 12-16 \approx 6 tectis; rostello e brunneo nigro, apice setulis hyalinis 12-18 \approx 2 prædicto; ascis evanidis hyalinis, ovoideis, circ. 20 \approx 10; sporidiis hyalinis, non guttulatis, ovoideis, sæpe uno latere depresso, 4-5 \approx 3-4; conidiis moniliformiter digestis (*Cylindrii* ad instar) breviter cylindraceis, 6-8 \approx 1,5-2,2, ex hyphis simplicibus enascentibus, ex albo cinereis.

Hab. in ligno, quod cyaneo tingit, *Liquidambaris styracifluæ*, prope Kirbyville Texas Amer. bor. (v. SCHRENK). — *C. piliferæ* affinis.

12. **Ceratostomella fusco-lutea** Rehm, Ann. Mycol. VI (1908) p. 320. 4348 — Peritheciis dispersis, ligno immersis, circa rostrum fusco-luteo-tincto, globosis, nigris, contextu parenchymatico, hyphis cerebrimis, simplicibus, plerumque rectis, septatis, c. 200 \approx 3, per ligni fibras currentibus obsessis, 0,5 mm. diam., rostro glabro, ob-

tuso, nigro, c. 0,4-0,5 mm. longo prominente; ascis cylindraceis, 90-100 \times 8-10, octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, guttam oleosam magnam includentibus, hyalinis, 12 \times 5, 1- rarius superne 2-stichis; paraphysibus filiformibus 4-5 μ . cr., septatis, hyalinis.

Hab. in ligno decorticato fagineo, in faucibus montis Hochgrad Algoviae (BRITZELMAYR). — A *Ceratostomella cirrosa* sporidiis diversissimis mox dignoscenda.

13. *Ceratostomella bambusina* v. Höhn., Stzb. k. Ak.-d. Wiss. Wien 4349 CXVIII, Abt. I (1909) p. 337. — Peritheciis erumpenti-superficialibus, gregarie sparsis, nigris, carbonaceis, fragilibus, globosis, 230-240 μ . diam., rostello erumpente, usque ad 600 μ . longo, supra 60 basi 80 μ . cr., curvulo, hyphis septatis, obscure rubro-brunneis, levibus, 2-4 μ . cr., laxis tecto; paraphysibus crassiuscule filiformibus, indistinctis; ascis sessilibus, tenuissime tunicatis, cylindraceis, 32 \times 3, octosporis; sporidiis monostichis, hyalinis, globosis, uniguttulatis, 2,5-3,5 μ . diam.

Hab. in culmis putrescentibus Bambusaæ Tjibodas in insula Java. — *Cer. sphærospermæ* Fuck. affinis.

14. *Ceratostomella mycophila* Rick, Broteria V (1906) pag. 48. — 4350 Stromate nullo; peritheciis in *Poria* quadam lignosa brunnea nidulantibus, $\frac{1}{3}$ mm. latis, ostiolum cylindricum atrum, 1 mm. altum $\frac{1}{5}$ mm. latum emittentibus, inter se liberis sed aggregatis; ascis sessilibus, a paraphysatis, 25 \times 6; sporidiis biserialibus, cylindricis 5 \times 2, subflavidulis.

Hab. in *Poria* sp., Rio Grande do Sul Brasilæ. — Species præclara vegetatione epipolyptorea et defectu paraphysium distincta. Stroma nullum adest hinc ad *Valsa*, cui in ceteris satisfacit, duci nequit. An *Valsa* ob singularem habitationem astromaticæ evasa? Gen. *Massalongiella* caret ostiolo elongato, quare neque bene ad hoc genus species nostra ducenda.

- ENDOCONIDIOPHORA** Münch, Naturw. Ztschr. f. Land.-u. Forstwirtsch. V (1907) pag. 531 (Etym. ex statu conidico endosporo). — Perithecia ligni stratu brunneo (an potius cyaneo?) omnino immersa; contextu ex hyphis brunneis 200 \times 4-6 constituto; hyphis angulo recto surgentibus et ex interiore apicis conidia cylindrica hyalina 4-5,5 μ . long. biguttulata, emittentibus (*Chalara Ungerii* Sacc.).

1. **Endoconidiophora cærulescens** Münch, l. c. p. 531, cum icon. — 4351 Peritheciis carbonaceis, ligno immersis, globosis, subdepressis, 160-

240 μ . diam., rostello usque ad 800 μ . longo, præditis, pilis con-spersis; sporidiis 6-8 \approx 2, in apice rostelli in massulas congregatis.

Hab. in ligno pineo cyaneo tincto putri in Germania.

GНОМОНИЕЛЛА Sacc. — Syll. I p. 413, IX p. 575, XI p. 289.

1. **Gnomoniella Catappæ** Koord., Botan. Untersuch. (1907) p. 192, 4352

fig. 19 I. — Maculis magnis, indeterminatis, arescendo fuscis; peritheciis stromate destitutis, tectis, coriacéis, nigris, globosis, 0,9 mm. diam., ostiolo cylindraceo 250-260 μ . longo, epidermidem perforante; ascis cylindraceis, 28-30 \approx 5-6, apice incrassatis et poro pertusis, 8-sporis; sporidiis hyalinis, elliptico-oblongis, utrinque subacutis, 10-11 \approx 2,5-3, continuis, biseriatis, rectis v. curvulis.

Hab. in foliis Terminaliæ Catappæ prope Purworedjo, Java (KOOEDERS).

Sect. 2. Phæosporæ.

CRYPTOASCUS Petri, Oss. sopra alcune malattie d. Olivo in Rend.

Accad. Linc. (1907) p. 642 (Etym. *cryptos* abditus, et *ascus*). — Perithecia superficialia, simplicia, fragilia, atra, carbonacea, collo plus minusve elongato instructa, glabra, basi radicata; asci globulosi, sine ordine dispositi, monospori, gelatinosi, mox evanidi; sporidia ovoidea, atra, bitunicata.

1. **Cryptoascus oligosporus** Petri, l. c. cum icon. — Peritheciis irregulariter excipuliformibus, nigris, carbonaceis, collo plerumque elongato, basi hyphis nigris instructis, 100-215 \approx 60-90; excipulo pseudoparenchymatico; ascis globosis, gelatinosis, hyalinis, 30-40 \approx 15-20; sporidiis paucis, crassis, levibus, ovoideis, tunica fuliginea opaca obovolutis, 27-33 \approx 15-18. 4353

Hab. in radicibus Oleæ europææ in Italia centrali et meridionali.

CERATOSTOMA (Fr.) Sacc. — Syll. I p. 215, IX p. 481, XI p. 278,

XIV p. 489, XVI p. 427, XVII p. 609.

1. **Ceratostoma crassicolle** Kirschst., Verh. Bot. Ver. Brandenb. 4354

XLVIII (1906) p. 52. — Peritheciis plerumque in ligno seriatim immersis, sed collo crasso et ostiolo scutellato prædicto tantum prominentibus, nigris, globosis, crasse membranaceis, extus pilis brevibus, brunneis, patentibus tectis, $\frac{1}{4}$ mm. circ. cr.; ascis elonga-

to-clavatis v. subcylindraceis, supra rotundatis, longe pedicellatis, octosporis, 100-200 \times 6 (p. sp. 40-60 μ . longa); sporidiis distichis v. irregulariter dispositis, nigricantibus, cylindraceis, utrinque rotundatis, unilocularibus, rectis v. curvulis, 9-12 \times 2,5-3; paraphysibus, numerosis, filiformibus, septatis, supra sensim acutatis, ascis superantibus, infra 3 μ . cr.

Hab. ad truncos pineos putres, prope Gross-Behnitz Germaniae.

2. *Ceratostoma Fairmani* Saccardo, Microm. Amer. novi, Journ. of 4355

Myc. v. XII (1906) p. 49. — Peritheciis late et laxe gregariis, ligno putri molli fere totis immersis, globulosis, 0,4-0,5 mm. diam., nigris, glabris, rostellatis; rostello cylindraceo-acutiusculo, 500 \times 100, nitidulo, levissime longitrorsum sulcato; ascis fusoideo-clavatis, subsessilibus, deorsum sensim tenuatis obtusisque, apice quoque leviter tenuatis obtusisque, octosporis, 19-22 \times 8-8,5 apophysatis; sporidiis oblique monostichis v. subdistichis, ellipsoideis, 7 \times 3-3,5, e fronte rectis, e latere curvis, olivaceis, inæqualiter 1-3-guttulatis.

Hab. in truncis putridis pr. Lyndonville, New York Amer. bor. — Affine *C. avoretæ*, a quo differt ascis subfusoideis, a paraphysatis, sessilibus, sporidiis brevioribus, etc.

3. *Ceratostoma Usterianum* Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV (1908) p. 18. — Peritheciis superficialibus arcte matrici adnatis, subiculo fumagineo destitutis sed hyphis paucis radiantis repentinibusque hyalinis ramulosis septulatis, 50-150 \times 2-3 radicatis, sparsis, vix perspicuis, globoso-depressis 80-100 μ . diam., glabris, coriacellis, contextu indistincto, antice ostiolo recto vel leuiter arcuato cylindraceo prælongo 150-400 \times 30-35 opaco apice non v. vix subinflato et truncato penicillato-ostiolato terminatis; ascis fasciculatis a paraphysatis, antice obtusis postice cuneato-attenuatis longiusculeque pedicellatis, p. sp. 38-50 \times 8-10, ped. 20-30 \times 2-3, octosporis; sporidiis ellipsoideis v. cymbiformibus monovalvatis, utrinque acutiusculis, 11-13 \times 4,5-5, plus minusve pallide fuligineis.

Hab. ad folia coriacea arboris speciei ignotæ (Myrtaceæ?) cujusdam, Pinheiros perto de Sao Paulo et Ipiranga, Cambucy Brasiliæ (USTERI). — Species mirabilis cum *Capnodiopside mirabilis* P. Henn. non comparanda, a genere vita biophila recedens et facile novi generis typum sistens.

ACANTHORHYNCHUS Shear, Bull. Torr. Bot. Cl. XXXIV (1907) p. 313 et Cranberry Diseas. p. 27, t. III, f. 12-22 (Etym. *acantha* spina et *rhynchos* rostrum). — Perithecia submembranacea, sparsa, infossa, rostellata; rostello acuto, ostiolato; ascii octospori, paraphysati; sporidia continua, brunneo-flava.

1. **Acanthorhynchus Vaccinii** Shear, l. c. p. 314. — Peritheciis am- 4357 phigenis, sparsis, subglobosis, v. subphialiformibus, submembranaceis, immersis, parum prominentibus, 120-200 μ . diam.; collo valido, exerto, ostiolato, peritheciis tertiam v. dimidiata parte attinente, rostellis nigris continua, 50-70 \times 8-9; ascis subellipsoideis v. subclavatis, subsessilibus, octosporis, apice poro apertis, 120-155 \times 22-44; paraphysibus septatis, ascis excedentibus; sporidiis oblongo-ellipsoideis, continua, pallide brunneo-flavis, muco mucilagineo circumdati, 24-32 \times 12-18.

Hab. in foliis Vaccinii macrocarpi, West Mills, New Jersey, Nova Scotia, Massachusetts, West Virginia Amer., bor.

Sect. 3. Hyalodidymæ.

LENTOMITA Niessl — Syll. I p. 584, IX p. 698, XIV p. 542, XVII p. 663.

1. **Lentomita brasiliensis** v. Höhnel, Ergebni. Bot. Exp. Südbras. 1901 4358 Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 24. — Peritheciis gregaris, superficialibus, globosis, carbonaceis, supra glabris, infra hyphis circumdati, 300 μ . diam. et collo cylindraceo nigricante 300-600 μ . longo, 45-50 μ . cr., apice pallidiore et usque ad 70 μ . clavato-incrassato; pseudoparaphysibus paucis tenuibus diffluentibus, septatis, 4 μ . cr., ascis longe superantibus; ascis numerosis, clavatis, tenuiter tunieatis, supra rotundatis, basi acutatis, 50-60 \times 6-7, octosporis; sporidiis mono- v. distichis, hyalinis, ellipsoideis, extus mucosis, semper bilocularibus, ad septum non constrictis, plerumque 10 \times 3, guttulatis.

Hab. in ligno indurato, in silvaticis prope Barra Mansa, alt. 1000 m., São Paulo Brasiliæ.

GNOMONIA Ces. et De Not. — Syll. I p. 561, IX p. 672, XI p. 302, XVI p. 483, XVII p. 664.

1. **Gnomonia Geranii** Hollós, Ann. Mus. Nat. Hungar. VII (1909) 4359 pag. 52. — Peritheciis sparsis v. laxè gregariis, globulosis, mem-

branaceis, nigris, 350-450 μ . diam., epidermide velatis, basi siccitate excavatis, contextu parenchymatico, ostiolo cylindraceo-rostellato, 170-250 \times 50, erumpentibus; ascis clavatis, subsessilibus, 36-40 \times 6-8, aparaphysatis, octosporis; sporidiis distichis v. oblique monostichis, fusoideis, rectis v. curvulis, 4-guttulatis, demum tenuerit 1-3-septatis, non constrictis, hyalinis, 14-18 \times 2.

Hab. in caulinibus siccis Geranii sanguinei prope Kecskemét Hungariae.

2. **Gnomonia tithymalina** Briard et Sacc. — Syll. IX, pag. 672. — 4360
var. **Sanguisorbæ** Rehm, Ann. myc. III (1905) p. 229. — Sporidiis rectis, oblongis, utrinque rotundatis, medio septatis, haud constrictis, quaque cellula biguttata, haud appendiculatis, 10 \times 2-2,5, distictichis ascis 4-6-sporis fusiformibus sessilibus, 25-27 \times 7-8.

Hab. in caulinibus et petiolis præteriti anni Sanguisorbæ officinalis, Königstein Saxoniæ (W. KRIEGER).

3. **Gnomonia dilacerans** Rehm, Ann. Mycol. V (1907) pag. 538. — 4361
Peritheciis gregariis, innatis, globosis, glabris, ostiolo conoideo primus per epidermidem prorumpente, dein epidermide dilacerata denudato, sessilibus, foveolam nigram relinquenter, 0,5 mm. diam., contextu membranaceo, parenchymatico; ascis cylindracis, longe stipitatis, p. sporif., 70 \times 7-8, octosporis; sporidiis fusoideis, subobtusis, medio constrictis et septatis, utrinque 1-guttatis, hyalinis, rectis vel subcurvatulis, 10-12 \times 3,5-4, monostichis; paraphysibus filiformibus, tenerrimis, septatis 3 μ . cr.

Hab. ad caules sicclos Rubi Idæi in fancibus supra Razzes Tirolie austr. (REHM). — A *Gnomon. depressula* sporidiis duplo amplioribus differt.

4. **Gnomonia Gei-montani** Ranojevic, Ann. Mycol. VIII (1910) p. 362. 4362
— Peritheciis sparsis, immersis, globosis, nigris, 210-500 μ . diam., rostro nigro usque ad 800 μ . longo, 38-47 μ . cr. præditis; ascis cylindrico-clavatis, elongato-fusoideis, in pedicellum tenuem attenuatis, 36-53 \times 4-7,5, octosporis; sporidiis fusoideis, bilocularibus, loculo inferiori angustiori, raro trilocularibus, 7,5-13,5 \times 1,5-2, hyalinis; paraphysibus nullis.

Hab. in foliis siccis Gei montani in M. Mindzur 2000 m. alt. in Serbia. — A *Gnom. Gei* rostro longiore, sporidiis fusoideis inæqualiter septatis diversa.

5. **Gnomonia occulta** Kirschst., Ver. Bot. Ver. Brandenb. XLVIII (1906) p. 58. — Peritheciis hypophyllis, sparsis, nigris, minutis, tenui-membranaceis, immersis, rostelllo longiusculo prominentibus;

ascis cylindraceo-clavatis, quandoque fere fusoideis, supra rotundatis bifoveolatis, sessilibus, octosporis, 30-40 \approx 6-7; sporidiis distichis, hyalinis, unilocularibus, fusoideis, utrinque rotundatis vel subcylindraceis, hyalinis, minute multiguttulatis, rectis v. curvulis, demum subbilocularibus, loculo altero minore, 8-10 \approx 2; paraphysibus nullis.

Hab. in foliis emortuis *Potentillaæ anserinæ*, Göttlin pr. Rathenow Germaniae.

6. **Gnomonia herbicola** A. L. Smith, Trans. Brit. Mycol. Soc. III 4364 (1910) pag. 221. — Peritheciis immersis membranaceis, nigris, depresso-globosis, atro-brunneis, 200-250 μ . alt., 60-70 μ . cr.; ostiolo producto nigro; contextu peritheciæ e cellulæ polygoniis crassiusculæ tunicatis formato; ascis copiosis clavatis, fusiformibus, aphysatis, crasse et breviter stipitatis, 25-40 \approx 5-7, octosporis; sporidiis ellipsoideo-fusiformibus continuis v. tenuiter uniseptatis, 3-4 guttulatis, 8-12 \approx 2-2,5.

Hab. gregatim ad basim caulis viventis *Epilobii hirsuti*, Derbyshire Britanniae.

7. **Gnomonia intermedia** Rehm, Ascom. exsicc. fasc. 42, n. 1794; 4365 Ann. Mycol. VI (1908) p. 489. — Peritheciis dispersis, plerumque folii superiore pagina innatis, globulosis, nigris, tenuissime filiformiter rostratis, 120-150 μ . diam., rostro glabro c. 300 μ . longo, 40 μ . cr., subfusco, versus apicem obtusum hyalino; ascis clavatis, teneris, 30-33 \approx 8-10, octosporis; sporidiis subconstricto-didymis, utrinque obtusis, rectis, medio septatis, utraque cellula biguttulata, haud appendiculatis, hyalinis, 8-12 \approx 3,5-4, distichis; paraphysibus nullis.

Hab. in foliis putridis *Betulae albae*, Neufriedenheim München, Bavaria (REHM). — A ceteris speciebus in *Betula* vigintibus bene distincta.

8. **Gnomonia Oryzae** I. Miyake, Pilze Reispfl. Japan, Journ. College 4366 Agricult. Tokyo, II (1910) p. 250, t. XIII, f. 26-28. — Maculis albescensibus; peritheciis primum immersis dein rostratis prominentibus, phialiformibus 150-200 μ . long., 76-95 μ . v. plerumque 90-95 μ . diam., nigris, pseudoparenchymaticis; ascis elongato-ellipsoideis basi angustatis 38-45 \approx 12-16 plerumque 40 \approx 15, octosporis; tunica supra tenui, infra crassa; sporidiis distichis v. irregulatiter distributis, fusoideis, rectis, bilocularibus, medio constrictulis, guttulatis, 15-16 \approx 4-5,5 saepe loculis inæqualiter crassis.

Hab. in glumis *Oryzae sativæ*, Awaji Japonia.

Sect. 5. Phæodidymæ.

RHYNCHOSTOMA Karst. — Syll. I p. 730, IX p. 750, XI p. 317,
XIV p. 559, XVII p. 689.

1. **Rhynchostoma minutellum** v. Höhnel, Fragm. z. Mykol., Sitzb. k. 4367

Ak. d. Wissensch. Wien Bd. CXVI Abt. I (1907) pag. 116. —
Peritheciis sparsis, immersis, nigris, carbonaceis, levibus, 250 μ .
diam., globosis, collo 250 μ . longo, 80 μ . cr. præditis; paraphy-
sibus simplicibus, filiformibus, crassiusculis; ascis cylindraceis, basi
breviter stipitiformi-angustatis, 100 \approx 5-7, octosporis; sporidiis ob-
lique monostichis, ellipsoideis, griseo-fumoso-brunneis, biloculari-
bus, ad septum non constrictis, 7-10 \approx 4.

Hab. in ligno abietino putri, Rekawinkel Austriae inf. —
Ab affinibus speciebus microsporis rostello brevi et ascis cylindraceis
diversa.

2. **Rhynchostoma brasiliense** v. Höhnel, Ergebniß Bot. Exp. Südbras. 4368

1901, Denk. k. Ak. d. Wissensch. Wien, Bd. LXXXIII (1907)
Extr. pag. 24. — Peritheciis superficialibus, basi immersis, arcte
gregariis, plerumque 2-3 approximatis confluentibusque, globoso-
piriformibus v. parum elongatis, carbonaceis, glabris, 400-500 μ . d.
collo 200-300 μ . longo præditis; ascis numerosis, cylindraceis, 50-
60 \approx 6-8, octosporis; paraphysibus numerosis, tenuiter filiformibus;
sporidiis monostichis, bilocularibus, brunneis, elongatis, subfusoi-
deis, utrinque obtusatis, medio constrictis, loculo superiore ple-
rumque crassiore, 8-10 \approx 3.

Hab. in ligno indurato, in silvaticis prope Barra Mansa circ.
1000 m. alt. Sao Paulo Brasilie. — *Rh. cornigero* Karst. affine.

Sect. 6. Hyalophragmiæ.

CERATOSPHÆRIA Niessl — Syll. II p. 227, IX p. 870, XI p. 840,
XVI p. 1137, XVII p. 715.

1. **Ceratosphæria cæspitosa** Lind et Vleugel, Svensk Botan. Tidskr. 4369

II (1908) pag. 365, fig. 1 a, b. — Peritheciis dense gregariis, ad
substratum laxe affixis, subsphæroideis, coriaceis, nigris, circ. 0,8
mm. diam., ostiolo rostrato, cylindraceo, sat crasso, firmo, circ. 0,4
mm. longo præditis; ostiolis e subiculo pulvinato prominentibus;

subiculo hyphis crassis, brunneis, septatis, repentinibus, 4,3 μ . cr., e peritheciis exaeuntibus formato; ascis numerosissimis, clavatis, subsessilibus, 50-65 \times 8,7-10, octosporis; sporidiis monostichis v. subdistichis, oblongis, utrinque obtusis, 4-loculatis, ad septa constrictis, paullo curvatis, brunneis, 17-20 \times 5-6, loculis duobus superioribus incrassatis; paraphysibus numerosis, septatis, ascis superantibus, ramosis, hyalinis, 2 μ . crassis.

Hab. in cortice ramulorum ex parte decorticatorum Ribis Grossulariæ, Vesterbatten, Suecia (VLEUGEL).

2. *Ceratosphæria macrorrhyncha* L. Gaja, Fl. micol. prov. Padova, 4370 p. 20 (sunto lit., 1911). — Peritheciis laxe gregariis v. solitariis, saepe sub cortice relaxato ramorum decumbentibus, coriaceis, globosis, $\frac{1}{3}$ mm. diam. circiter, longe rostratis, siccis collabescientibus, atris; rostris cylindraceis, interdum ad apicem curvulis et attenuatis, 750-800 μ . longis; ascis breviter stipitatis, octosporis, cylindraceis, parte sporifera 200-230 \times 10-11, hyalinis; paraphysibus tenuibus, ascis fere æquantibus, granulosis; sporidiis subfusoideis, hyalinis, constanter 3-septatis, nos constrictis, 23-25 \times 9-10, recte monostichis.

Hab. sub cortice relaxato ramorum emortuorum Buxi sempervirentis, Cattajo, prope Battaglia, in Euganeis Ital. bor. — A *Ceratosphæria occultata* Feltg. cui magis accedit, differt longitudine rostrorum, numero septorum et dispositione sporidiorum, neenon habitatione sub cortice relaxato.

HYPOSPILA Fr. — Syll. II p. 189, IX p. 849, XI p. 336, XIV p. 587.

1. *Hypospila bavarica* Rehm, Ann. Mycol. VI (1908) p. 322. — Pe- 4371 ritheciis in folio, pro parte dealbato, gregariis, epiphyllis, singulis maculae orbiculari subfuscæ innatis, globosis, papillula brevissima conoidea, saepe lateraliter emergente, nigris, glabris, 0,2 mm. d. contextu parenchymatico; ascis fusiformibus, 60 \times 10, octosporis; sporidiis oblongo-fusoideis, subobtusis, rectis vel subcurvatis, 1-septatis, haud constrictis, utraque cellula guttis duabus oleosis magnis repleta, utrinque brevissime appendiculatis, hyalinis, 12-15 \times 3-3,5, distichis; paraphysibus nullis.

Hab. in folio putrido Aceris Pseudoplatani, Neurieden-heim pr. München (REHM).

2. *Hypospila ? rubicola* Speg., Fungi Chilenses (1910) p. 74. — Ma- 4372 culis nullis; peritheciis laxe gregariis epidermide clypearium nigre-

facta velatis, lenticularibus, in sicco saepius subcupulato-collapse, 100-150 μ . diam.; ascis subcylindraceis breviter pedicellatis, paraphysatis, octosporis, 70-90 \times 5-6; sporidiis rectis v. oblique monostichis, ellipsoideis, utrinque plus minusve acutiusculis, parvis, hyalinis, primo 1-septato-constrictulis, 4-blastis, dein 3-septatis, non constrictis, 11-14 \times 3-5.

Hab. in ramis siccis Rubi sancti, Bahia de Corral Chile Amer. aust.

Sect. 7. Phæophragmiæ.

RHYNCHOSPHÆRIA Sacc. — Syll. II p. 112 et 228, XVI p. 524, XVII p. 740.

1. **Rhynchosphæria chætosporioides** Rehm, Ann. Mycol. VI (1908) 4878 p. 322. — Peritheciis gregariis, emergentibus, dein sessilibus, globosis, contextu parenchymatico molli, nigris, 100-150 μ . diam., hyphis simplicibus fuscis, septatis, 30-60 \times 4-5, obtusis, sparsis obsessis, in rostrum 600 \times 30 filiforme glabrum elongatis; ascis ovoideo-clavatis, sessilibus, octosporis, 35 \times 10-12; sporidiis fusoideo-ellipticis, 3-septatis, ad septa haud constrictis, rectis, cinereo-fuscidulis, 10-12 \times 4, di-tristichis; paraphysibus ramosis, conglutinatis.

Hab. ad lignum putridum pineum in monte Arber Silvae bavaricæ (REHM).

2. **Rhynchosphæria megas** Rehm, Ann. Mycol. VII (1909) p. 536. — 4874 Peritheciis gregariis, primitus innatis, dein, ligno corroso, fere sessilibus, globosis, papillula conoidea elongata, apice obtusa, poro perspicuo pertusis, carbonaceis, fusco-atris, glabris, senilibus verruculosis, 1-2 mm. diam. et altis; ascis cylindraceis, longe stipitatis, p. sporif. 100 \times 12, octosporis, J -; sporidiis ellipsoideis, utrinque rotundatis, 3-septatis, unaquaque cellula 1-guttata, rectis, fuscidulis, cellulis terminalibus brevioribus et subhyalinis, ad septa subconstrictis, 16-17 \times 6, monostichis, subinde distichis: varaphysibus filiformibus.

Hab. in ligno putrido Sao Leopoldo, Rio Grande do Sul. Brasilæ (THEISSEN S. J.). — *Rh. ceratophoræ proxima*.

Sect. 8. Hyalodictyæ.

RHAMPHORIA Niessl — Syll. II p. 307, IX p. 913.

1. **Rhamphoria icterodes** (Riess) Sacc., in Ann. Myc. IX (1911) p. 250, 4875
Sphaeria icterodes Riess in Klotzsch, Herb. mycol. Cent. XVIII,
n. 1739, Bot. Zeit. 1853, p. 236, Hedwigia I, p. 24, t. III, f. i, l, k.
— Sparsa, lignicola, immersa, interiorem ligni partem circumdecreta
colore citrino tingens; peritheciis coriaceis nigris, subglobosis, 360-
376 μ . diam., contextu pseudoparenchymatico obscure fuligineo,
ostiole tereti conoideo erumpente apice poro pertuso, perithecium
subaequante; ascis tubulosis, octosporis, 100-115 \times 7; paraphysibus
filiformibus mucosis; sporidiis uniserialibus, oblongis, utrinque ro-
tundatis, 14-15 \times 5-5,5, pellucidis, guttulas numerosas irregulariter
positas, saepius 3-5-seriatas, minutas continentibus, demum 3-5-
clathrato-pseudoseptatis.

Hab. in lignis arboris frondosæ in Germania. — Perithecia,
amicho ostiole, saepè collabascunt. Species mihi diu obscura, tan-
dem inspecto specimine originali, clare innotuit.

2. **Rhamphoria thelocarpoidea** v. Höhnel, Stzb. k. Ak. d. Wiss. Wien, 4876
CXVI (1007) p. 124, *Coronophora thelocarpoidea* v. Höhnel, Stzb.
k. Ak. d. Wiss. Wien, CXV, Abt. I (1906) p. 13. — Peritheciis
nigris, carbonaceis, pro more piriformibus, e subcutaneo dein nu-
datis et superficialibus, conico-papillatis et poro minuto pertusis,
solitariis v. 2-pluribus coacervatis, 220-260 μ . lat., 300-360 μ . alt.;
ascis paucis, non v. breviter pedicellatis, clavatis, sursum tenuatis
apiceque truncatis, 170-200 \times 14-16; sporis spermatioideis ovoideo-
oblongis, 2 \times 1, hyalinis, creberrimis, sporidia occultantibus; spori-
diis genuinis monostichis clavato-oblongis, 27 \times 7, hyalinis, 7-8-
septatis muriformibusque.

Hab. in ramo partim decorticato putrescente Fagi silivaticæ,
Wienerwald prope Vindobonam Austriae. — Affinis *Rhamphoria*
tympanidispora Rehm.

Sect. 9. Scolecosporæ.

OPHIOCERAS Sacc. — Syll. II p. 358, IX p. 938, XI p. 353, XIV
p. 616.

1. **Ophioceras Bambusæ** v. Höhn., Stzb. k. Ak. d. Wiss., CXVIII, 4877

Abt. I (1909) pag. 337. — Peritheciis sparsis, epidermide tectis, nigris, pellucidis, depressis, subscutellatis, levibus, nitidulis, ellipsoideis, usque ad 1 mm. long. et $\frac{2}{3}$ mm. latis, rostelllo 60-100 μ . late, fragili, erecto, curvulo, 2-2,5 mm. longo, nigro præditis; ascis cylindraceis, subfusoideis, breviter crasseque pedicellatis, obtusis, tenuiter tunicatis, 90-95 \times 5,5-6,5, e tetrasporo octosporis; pseudoparaphysibus numerosis, plerumque ascos longe superantibus, tenuissime tunicatis, guttulatis, septatis, 4-10 μ . cr.; sporidiis hyalinis, filiformibus, utrinque angustato-obtusulis, indistincte septatis, incurvatis, 70-80 \times 1,5.

Hab. in culmo putri *Bambusa*, Tjibodas in ins Java.

2. **Ophioceras Corni** Richon, Catal. Champ. Marne pag. 327 et 524, 4378 c. ic. — Peritheciis in greges parvos dispositis, sphæroideis, nigris, ostiolo longo flexuoso donatis; ascis cylindraceis; sporidiis filiformibus crebro guttulatis, 45 μ . longis.

Hab. in ramis decorticatis *Corni sanguineæ* in Gallia.

OPHIOGNOMONIA Sacc. — Syll. I p. 419, XIV p. 613, XVII p. 776.

1. **Ophiognomonia Padi** Jaap, Verh. Bot. Ver. Brandenb. XLVII 4379 (1905) p. 87. — Peritheciis gregaris plerumque hypophyllis et in maculis magnis pallescentibus insidentibus, immersis, globosis, 0,5 mm. latis, ostiolo rostellato 1-1,5 mm. longo, nigro, recto præditis; ascis elongato-fusoideis, basi in pedicellum attenuatis, octosporis, 60-63 \times 5; sporidiis filiformibus, supra usque ad 2 μ . incrassatis, obtusis, 42-51 μ . long., 1,2-1,5 μ . cr., hyalinis, minute guttulatis, fasciculatis.

Hab. in foliis *Pruni Padi* prope Triglitz in Prignitz Germaniaæ. — Verisimiliter status conidicus huius speciei est *Asteroma Padi* DC. Incertum est an *Sphaeria padicola* Lib. huc pertineat.

2. **Ophiognomonia helvetica** Rehm, Ann. Mycol. V (1907) p. 543. — 4380 Peritheciis sparsis, globulosis, hypophyllis et in epiphylo protuberantibus, innatis, ostiolo papilliformiter prominente, 0,25 mm. d., glabris; contextu parenchymatico; ascis creberrimis, cylindraceis, ca. 200 \times 8-9, octosporis; sporidiis filiformibus, pluri-guttulatis, haud septatis, hyalinis, ca. 150 \times 1,5, parallele positis, extra ascum mox vermiculiter curvatis; paraphysibus nullis.

Hab. in foliis sicris *Salicis herbaceæ*, Lajett ad Pic Aela, Graubünden Helvetiæ (Dr. VOLKART).

3. **Ophiognomonia caulicola** v. Höhn. Fragm. Mykol. VIII (1909), in 4381 Sitzb. k. Ak. d. Wiss. Wien CXVII, Abt. I, p. 1213. — Peii-

thecii solitariis v. plerumque seriatis v. gregariis, saepe fere confertim effusis, in cortice interne nidulantibus, basi applanata insidentibus, dein cortice secedente liberis, globosis, 360-450 μ . latis, 300 μ . altis, rostello 1-2 mm. longo, cylindraceo, basi circ. 100 μ . supra 60 μ . crasso præditis, levibus, glabris, carbonaceis, nitidulis, æqualiter tenuiter incrassatis, fragilibus, opacis, nigris; paraphysibus nullis; ascis fusoideo-clavatis, tenuiter tunicatis, sessilibus, 84 \times 5,5 quique-octosporis; sporidiis subparallelis, cylindraceo-filiformibus, utrinque obtusis, unilocularibus, multiguttulatis, 50-60 \times 1,5.

Hab. in ramis emortuis putrescentibus, verisimiliter *Salvia-glutinosa* prope Ybossitz in Austria inf. (STRASSER).

LINOSPORA Fuck. — Syll. II p. 354, IX p. 935, XI p. 352, XIV p. 618, XVII p. 775.

1. **Linopora Elasticæ** Koord., Botan. Untersuch. (1907) pag. 193, 4892 fig. 20. — Peritheciis atris, gregariis, foliorum parenchymate immersis, epidermide tectis, demum perforantibus, ovoideo-globulosis, 0,22 mm. latis, clypeo discoideo vel pulvinato, in vivo succoso, sordide albo v. flavescente-albo 0,28 \times 0,42 mm. lato, ostiolo capillari, nigro, glabro, rectiusculo v. curvulo, facile deciduo, 600 μ . longo, 30 μ . lato; ascis cylindraceis, apice rotundatis, subsessilibus per basim dehiscentibus, 88-98 \times 4-4,5 fasciculatis, a paraphysatis; sporidiis 8 bacillaribus, continuis, rectiusculis v. curvulis, 84-88 \times 1-1,5, utrinque truncatis, hyalinis, multiguttulatis.

Hab. in foliis putrescentibus Fici elasticæ prope Purworedjo prov. Kedu in ins. Java (KOORDERS). — *Linosp. capillari* Penz. et Sacc. proxima, differt sporidiis tenuioribus et clypeo carnoso.

2. **Linopora subtropicalis** Speg., An. Mus. Nac. Buenos Aires t. XIX 4883 (1909) p. 403. — Peritheciis epidermide persistente scutatim nigrefacta tectis, lenticularibus, 150-180 μ . diam., vix papillato-ostiolatis; ascis fusoideis apice crasse tunicatis basi breviter cuneato-pedicellatis, 90-110 \times 10, octosporis; sporidiis hyalinis, pluriguttulatis 70 \times 1.

Hab. ad scapos aridos Onocidii cujusdam in silvis primævis secus Rio San Lorenzo, Salta, Argentina Amer. austr.

OPHIOBOLUS Riess — Syll. II p. 337, IX p. 923, XI p. 351, XIV p. 614, XVI p. 557, XVII p. 769. — Pleraque species donantur

ostiolo non vere rostellato sed papillato, hinc genus hoc, demptis nonnullis speciebus, potius Sphaeriaceis quam Ceratostomataceis adscribendum videtur.

1. **Ophiobolus styracincola** Rehm, Ann. Mycol. V (1907) p. 529. — 4384

Peritheciis dispersis, in hypophyllo immutato, inter pilos folii sessilibus, globosis, 150 μ . diam. in papillulam 60 μ . longam, 40 μ . lat. abeuntibus, glabris, contextu parenchymatico membranaceo, fusco; ascis cylindraceo-clavatis, apice rotundatis, 100-120 \times 9-10, tetrasporis; sporidiis filiformibus, apice obtusis et sublatioribus, infra acutatis, 8-10-septatis, quaque cellula biguttata, hyalinis, 80 \times 2,5, parallele positis; paraphysibus subramosis, 1,5-2 μ . cr., hyalinis.

Hab. ad folia *Styracis*, Sao Leopoldo, Rio Grande do Sul, Brasilia (RICK). — *Oph. Tanaceti* affinis.

2. **Ophiobolus minor** Bubák, Ann. Mycol. IV (1906) p. 110. — Pe- 4385
ritheciis globosis vel leniter depresso, cortice immersis vel collo brevi vix prominulis, dein erumpentibus, nigris, nitidulis, 200-300 μ . diam., contextu parenchymatico olivaceo; ascis cylindraceis 65-90 \times 7-9, rectis v. curvulis, supra rotundatis, basi breviter pedicellatis, paraphysibus filiformibus immixtis; sporidiis filiformibus plus v. minus incurvatis, 55-70 \times 2-2,5, utrinque acutatis, multi-guttulatis, pluriseptatis, hyalinis.

Hab. in ramulis vivis *Loniceræ Xylostei* prope Tabor in Bohemia.

3. **Ophiobolus microstomus** Speg., Fungi Chilenses (1910) p. 95. — 4386
Peritheciis sparsis v. laxe gregariis, primo tectis dein nudis, superficialibus, subglobosis, superne acutato-ostiolatis, duris, carbonaceis, glabris, 200-250 μ . diam.; ascis linearibus breviter pedicellatis dense paraphysatis, 170 \times 10; sporidiis octonis asco conspicue brevioribus, filiformibus, chlorinis, pluriseptatis, 90-100 \times 2.

Hab. in pedunculis emortuis putrescentibus *Lobeliae Tupæ* prope Ciudad de Valdivia Chile Amer. austr. — *Oph. porphyrogono* (Tode) affinis sed differt sporidiis brevioribus, ostiolo minus distincto, maculis nullis.

4. **Ophiobolus sceliscophorus** Fairm., Proc. Rochest. Ac. of Sc. IV (1906) p. 215, tab. XX, fig. 1. — Peritheciis minutis, nigris, in maculis arescentibus insidentibus; ascis clavato-cylindraceis, plerumque incurvatis, raro rectis, 90-100 \times 10; paraphysibus non viisis; sporidiis filiformibus, incurvatis, 10-11-septatis, articulis versus apicem sœpa subincrassatis, hyalinis, 90 \times 2,5-3.

Hab. in foliis *Phlogis Drummondii*, Lyndonville New York Amer. bor. — Etym. a *scelisco* crus, ob formam sporidiorum.

5. **Ophiobolus hypophyllus** Rehm, Ann. Mycol. VI (1908) p. 317. — 4388
Peritheciis in hypophyllo late hyalino-flavidulo dispersis, primitus innatis, dein emergentibus, globulosis, vix papillulatis, glabris, nigris, 150 μ . diam., contextu parenchymatico, fusco; ascis cylindraceis, apice rotundatis, 80-100 \times 8-10, tetrasporis; sporidiis filiformibus, rectis, utrinque obtusis, 7-septatis, quaque cellula biguttata, hyalinis, 60-80 \times 2-2,5, parallele positis; paraphysibus filiformibus, septatis, 2 μ . crassis.

Hab. ad folia viva *Solanaceæ*, cujusdam Sao Leopoldo, Rio Grande do Sul, Brasilie (Rick S. J.).

6. **Ophiobolus Rostrupii** Ferdinandsen et Winge, Botan. Tidsskrift 29 4389
Bd. (1909) p. 317, fig. 6. — *Peritheciis amphigenis, primo tectis, dein epidermidem pustuliformiter levatam perforantibus, lenticulari-globosis, 300-400 μ . diam., vix ostiolatis, poro circ. 30-40 μ . diam. pertusis, submembranaceis, atris; ascis cylindraceis, apice rotundatis, deorsum attenuatis, sessilibus, 130-140 \times 14-16, junioribus membrana valde incrassata, poro nullo; sporidiis octonis, filiformibus, flexilibus, saepius parallele fasciculatis, septis 6-7 genuinis, nonnumquam paucis spuriis instructis, ad septum tertium v. quartum profundius constrictis, ceterum viz constrictulis, 115-135 μ . long. ad constrictionem profundam utrobique 4,5-5,5 μ . lat., hinc apicem versus lenissime, basim versus magis attenuatis, superne 3-4 μ ., inferne 1-2 μ . lat., hyalinis; paraphysibus laxis, evanidis, tenuissime septatis, hyalinis, ascos superantibus.*

Hab. ad folia viva *Brunellæ* sp. in Insula Unalaska Aleutarum Amer. bor.

7. **Ophiobolus phragmosporus** Speg., An. Mus. Nac. Buenos Aires 4390
t. XIX (1909) p. 402. — *Peritheciis matrice atrata sparsis, erumpenti-subsuperficialibus, subconoideis, acute majusculeque papillato-ostiolatis 200-250 μ . diam., atris; ascis linearibus breviter cu-neato-pedicellatis 170-180 \times 14-15, paraphysatis, octosporis; sporidiis fasciculatis flavidulis, fragilissimis, 120-140 \times 4-5, articulis cylindraceis 12-15, brevibus, grosse biguttulatis praeditis.*

Hab. ad caules aridos *Echii plantaginei* in pratis La Plata, Argentina Amer. austr. — Species eximia mox dignoscenda.

8. **Ophiobolus rivulariosporus** Starb., Ascom. Schwed. Chaco-Cordill. 4391
Exp., Arkiv f. Bot. t. V (1905) p. 24, fig. 20. — Peritheciis immersis, per epidermidem fissam erumpentibus, demum liberatis,

superficialibus, interdum sparsis, saepissime seriatim vel aliter aggregatis, conoideo-globosis, manifestim, interdum abrupte, conice vel fere cylindrice papillatis, totis glabris, perpaullum rugosiusculis, contextu coriaceo, basim versus prosenchymatico, cellulis seriatis, ostiolum versus globulosis, atratis, sub lente nigro-fuligineis c. 300 μ . diam.; ascis octosporis, cylindraceo-clavatis, sursum rotundatis, sessilibus, 139-150 \times 12,5-14; sporidiis fasciculatim conglobatis, clavulato-filiformibus, sursum appendice mucosa, sphæroidea, circa 5 μ . diam. semper ornatis, clavulatim incrassatis, clavula saepissime triseptata, ad inferius septum paullum constrictis, deorsum sensim et attenuatim acutatis, guttulis moniliformiter ordinatis præditis, deinde totis septatis, chlorino-olivaceis, 127-135 μ . longis, superne 4,5 μ ., inferne 2,5 μ . crassis; paraphysibus filiformibus, conglutinatis, hyalinis.

Hab. in caulinibus aridis Compositarum sp., Tarija Boliviae.

— Fabrica sporidiorum pulcherrima hæc species prædistincta.

9. *Ophiobolus chilensis* Speg., Fungi Chilenses (1910) pag. 95, cum 4392 icon. — Maculis nullis; peritheciis laxe gregariis, primo epidermide tectis dein erumpentibus v. denudatis atris, e globoso subconoideis, 150 μ . diam., glabris sed basi saepius hyphis paucis, 50-100 \times 3-4 cinctis, ostiolo acutiusculo papillato coronatis, coriacellis; ascis cylindraceis modice attenuato-pedicellatis, paraphysatis, 170 \times 12; sporidiis asco dimidio brevioribus, acicularibus, 15-locularibus, loculo quarto supero leniter inflato, obscure chlorinis, 80-85 \times 3-5.

Hab. in pedunculis emortuis putrescentibus Cirsii lanceolati prope Ciudad de Valdivia Chile Amer. austr.

10. *Ophiobolus Morthieri* Sacc. et Berl. — Syll. IX, p. 920. — var. 4393 *Senecionis* Rehm in Strasser, Verh. k. k. zool.-bot. Ges. Wien LVII (1907) p. 318. — Peritheciis globosis 1,5 mm. diam., pilis brunneis obsitis, collo elongato usque ad 200 μ . longo præditis; ascis octosporis 120-180 \times 6-8; sporidiis filiformibus ascos subæquantibus.

Hab. in caulinibus emortuis Senecionis nemorensis, Holzschlängen Sonntagberg Austria inf.

11. *Ophiobolus tenellus* (Awd.) Sacc. — Syll. II, pag. 346. — var. 4394 *Lactucæ* Rehm, Ascom. Exsicc. fasc. 43, n. 1808 et Ann. Mycol. VII (1909) p. 136. — Peritheciis denique omnino immersis, ostiolo vix emergente et sensim cylindraceo; ascis 150 \times 8-9, 8-sporis; sporidiis parallele dispositis, luteolis, 8-12-cellularibus, 100 \times 1,5-2, extra ascum mox incurvatis.

Hab. in caulibus emortuis *Lactuca salignæ* prope Grosshadern München Bavariæ (REHM).

12. **Ophiobolus Broussonetiæ** Hollós, Ann. Mus. Nat. Hungar. V 4395 (1907) pag. 46. — Peritheciis primum epidermide tectis, demum erumpentibus, nigris, 450-550 μ . latis, ostiolo cylindraceo-conico, 170-280 \times 140; ascis cylindraceis, apice rotundatis atque incrassatis, breve stipitatis, octosporis, 150-160 \times 3,5-4, filiformi paraphysatis; sporidiis æqualiter filiformibus, rectis v. curvulis, continuis, hyalino-luteolis, asco æquifungis, 0,5 μ . cr.

Hab. in ramulis siccis Broussonetiæ papyriferæ, Kecskemét Hungariæ.

13. **Ophiobolus Nipæ** P. Henn., Hedwigia XLVII (1908) p. 257. — 4396 Peritheciis gregariis innato-erumpentibus, rotundato-depressis, atris ostiolo conoideo, 0,5-0,6 mm. diam.; ascis cylindraceo-clavatis, vertice obtuso-rotundatis, curvulis, 8-sporis, 100-120 \times 10-13; sporidiis filiformibus, parallelis, utrinque obtusis, curvulis, pluriseptatis, 80-100 \times 2,5-3,5, hyalinis.

Hab. in petiolis emortuis Nipæ urticantis, Luzon, Prov. Pampanga. San Esteban Ins. Philippin. (MERRILL).

14. **Ophiobolus Livistonæ** P. Henn., Hedwigia XLVII (1908) p. 257. 4397 — Peritheciis gregariis innato-erumpentibus, superficialibus, rotundato-depressis, atris, conico-ostiolatis, 0,4-0,5 mm. diam.; ascis cylindraceo-fusoideis, obtusiusculis, paraphysatis, 8-sporis, 80-110 \times 5-8; sporidiis parallelis, filiformibus, obtusis, pluriseptatis hyalinis, 70-80 \times 2.

Hab. in petiolis emortuis Livistonæ, Mindanao, Davao Ins. Philippin. (COPELAND).

15. **Ophiobolus Oryzæ** I. Miyake Pilze Reispfl. Japan (in Journ. College 4398 Agricult. Tokyo, II (1910) p. 249, t. XIII, f. 20-22. — Peritheciis nigris, crasse pseudoparenchymaticis, globosis v. ellipsoideis, immersis sed ostiolo verruciformi prominulis, 250 μ . circ. diam., 300 μ . circ. altis; ascis cylindraceis, 125-150 \times 8-10, octosporis; paraphysibus filiformibus ascis æquantibus v. parum longioribus; sporidiis filiformibus, curvatis et contortis, 5-7-septatis, obscure flavis 100-130 \times 2-3.

Hab. in foliis et glumis Oryzæ sativæ in Japonia.

16. **Ophiobolus Ellisianus** Berlese, Icon. fung. II, p. 127, t. 154, f. 2. 4399 — Peritheciis sparsis, atris, primo tectis, dein prominulis, membranaceis, globoso-depressis, ostiolo minuto papillato, obtusulo, $\frac{1}{4}$ mm. diam.; ascis cylindraceo-clavulatis, 170-190 \times 11-13, basi atte-

nuato-stipitellatis, octosporis; sporidiis longe cylindraceis crebre
23-26-pseudoseptatis, utrinque rotundatis, 150-165 \times 3-4, lutescen-
tibus, loculis omnibus subæqualibus, non secedentibus.

Hab. in caulis herbaceis, Utah Amer. bor. (J. B. ELLIS).

Fam. 4. Xylariaceæ TUL. ().*

Sect. 1. Phæosporæ.

HYPOXYLON Bull. — Syll. I p. 352, IX p. 543, XI p. 385, XIV
p. 509, XVI p. 445, XVII p. 855.

1. **Hypoxylon lichenicola** v. Höhnel, Ergeb. Bot. Exp. Südbras. 1901, 4400
Denk. k. Ak. d. Wiss. Wien Bd. LXXXIII (1907) Extr. p. 26. —
Stromatibus erumpentibus demum superficialibus, parvis, irregu-
lariter rotundatis; peritheciis 1 v. paucis v. numerosis et tunc
2-4 seriatis, globosis, distincte papillato-ostiolatis, carbonaceis, ni-
gris, opacis et sæpe rugulosis, 600-1000 μ . diam., prominentibus
v. plus minus immersis; ascis cylindraceis 160-180 \times 10-12, octo-
sporis; paraphysibus numerosis, filiformibus, ascis longitudine æ-
quantibus, demum mucoso-diffluentibus; sporidiis monostichis, elon-
gato-fusoideis, utrinque obtusis, nigris, unilocularibus, 30-38 \times 8-9,5.

Hab. parasiticum in podetiis sterilibus Cladoniae (?) sp. ad
fumen Rio Pardo in districtu S. Cruz Sao Paulo Brasiliae.

2. **Hypoxylon bogoriense** von Höhnel, Stzb. k. Ak. d. Wiss. Wien 4401
CXVIII, Abt. I (1909) pag. 341; Rehm, Ascom. exs. fasc. 44,
n. 1844, Ann. Mycol. VII (1909) p. 404. — Stromate tenui late
effuso, plerumque usque ad 20 cm. et ultra longo, primum viola-
ceo-brunneo dein obscuriori striato, margine acuto v. sensim de-
fluente; peritheciis arcte gregariis, prismaticis, 600-700 μ . altis,
260 μ . latis, convexulis, peritheciis centralibus usque ad 100 μ . lat.
ostiolato-papillatis; ascis cylindraceis, numerosis, octosporis, 65 \times 3;
sporidiis laxe monostichis, elongato-cylindraceis, rectis v. vix cur-

(*) Cfr. F. Theissen, *Xylariaceæ austro-americæ*, in Ann. Mycol. VI et
VII (1908-1909) et *Xylariaceæ austro-brasilienses*, in Denkschr. k. Akad.
Wien LXXXIII (1909).

vulis, utrinque rotundatis, pallide brunneo-violaceis, 5,5-6 \times 1,8-2; stromate intus fragili, carbonaceo.

Hab. in ramis putrescentibus *Albizziæ moluccanæ*, in Horto bot. Buitenzorg in ins. Java.

3. **Hypoxylon Starbæckii** Ferd. et Winge, Botanisk Tidsskrift XXIX 4402 (1908) p. 14, *Hypoxylon areolatum* Starb., Ascom. Schw. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 31, fig. 22, non B. et Curt. — Syll. I, pag. 366. — Stromatibus applanatis vel fere hemisphærico-pulvinatis, superficialibus, margine tumido, fere libero, superficie primo levigata, verticibus peritheciorum applanatis, irregulariter polygono-limitatis in areolas divisus, demum hinc inde tuberculosis, pruina primo ferrugineo-rubiginosa, denique fusco-nigra, detersibili obsessis, vetustate rimosis, intus hinc inde rimosim excavatis, 2-3 cm. longis, 1-2 cm. latis, $1\frac{1}{2}$ - $2\frac{1}{3}$ cm. altis, textura fibroso-coriacea, fere suberosa vel daldiniacea, non zonata; peritheciis polystichis, marginem versus saepe arcuatis, tubulosis vel elongatis, demum papillatim paullumque prominulis, vertice non pruinoso plicato-rugoso, ore vix visibili perforato, usque ad $1\frac{1}{2}$ mm. altis, $\frac{1}{8}$ mm. diam.; sporidiis fuscis, navicularibus, 12-17 \times 9-10 e latere 5-7,5 μ . cr.

Hab. ad trunco, Gran Chaco, Tatarenda Boliviæ. — *H. solidum* Berk., sporidiis diversum, *H. dubiosum* Speg., peritheciorum dimensionibus praesertim divergens. An potius *Penzigiaæ* sp., observante auctore?

4. **Hypoxylon multiforme** Fr. — Syll. I, pag. 363 — *H. granulosum* 4403 Bull. — var. *luxurians* Rehm, Ann. Myc. III (1905) p. 229, Ascom. exsicc. n. 1595. — Stromatibus late irregulariter effusis, undulato-rugosis, margine saepe sterilibus, crassis, duris, superimpositis, nigris.

Hab. ad lignum putre betulinum, Falkenberg Bavariae (PLOSEL, PAZSCHKE).

5. **Hypoxylon Pseudo-tubulina** Ces. — Syll. I, p. 364 — var. *macro-spermum* 4404 Theiss., Ann. Mycol. VI (1908) p. 346. — Peritheciis paucis, 3-6 in quoque stromate, globoso-angulatis; stromate intus albo, superficie valde verrucoso-scruposo; ostiolis ob verrucas imperspicuis, mox areola delicatissima micante instructis, dein poro pertusis; ascis maximis, 200-240 \times 14-17, pedicello 40-80 \times 5-6; sporidiis elongato-fusoideis, utrinque angustato-obtusulis vel subapiculatis, opacis, gutta una magna vel biguttatis, 40-46 \times 12-15.

Hab. ad cortices crassos in silva, Sao Leopoldo Brasiliæ. —

Diffreret a typo stromatibus minoribus sporidiisque multo majoribus. — Var. **macrostroma** Theiss., l. c. — Stromatibus saepe majoribus, usque ad 6 mm. diam. vel pluribus connatis, gyroso-mammillatis, intus albis; peritheciis solidis, atris, globosis v. angulatis, parietibus crassis instructis, 500-800 μ . diam.; ascis 130-170 μ ., pedicello 60-90 μ . longo; sporidiis 30-38 \approx 8-9. — Ad trunco, Sao Leopoldo. — *Hyp. cantareirensi* P. Henn. valde affine nisi identicum.

6. **Hypoxylon nucigenum** P. Henn., Hedwigia XLVII (1908) p. 259. 4405

— Stromatibus subgloboso-depressis, cinereo-fuscis v. nigricantibus, superficie subareolatis, conico-ostiolatis, intus pallidis dein atro-fuscis c. 2-2,5 cm. diam.; peritheciis angulato-ellipsoideis, lignosis, cinereo-fuscis, 5-7 mm. diam. (nuci Pini Cembræ similibus); ascis cylindraceis, 8-sporis, plerumque secedentibus; sporidiis oblique monostichis, oblonge navicularibus, utrinque obtuso-rotundatis, atris, 40-52 \approx 10-13.

Hab. in truncis emortuis, Luzon, Prov. Bataan, Lamas River Ins. Philippin. (COPELAND).

7. **Hypoxylon Heinricherii** Bres., Ann. Mycol. V (1907) p. 241. — 4406

Stromatibus pulvinatis, 1 cm. circiter diam., fuscis, intus albis; peritheciis immersis, subglobosis, ostiolis emergentibus, papillatis, nigris præditis; ascis jam resorptis; sporidiis late obovatis e latere subdepressis, fuscis, 12-15 \approx 7-9.

Hab. ad ramos corticatos in insula Java (HEINRICHER).

8. **Hypoxylon crassum** Mattiolo et Sacc., Ann. di Botan. VII (1908) 4407 p. 144 et in Il Ruwenzori (1909) Fungi p. 11, t. III, f. 6-8. —

Stromatibus superficialibus majusculis, e subgloboso hemisphæricis, basi leviter coarctatis, 2-3 cm. circiter latis, 0,7-1 cm. altis, carbonaceis, nigris, subopacis, superficie ob ostiola prominula mammillosis, intus atro-fuligineis, suberosis, non stratosis; peritheciis densis, monostichis, immersis, levissime emergentibus, ovoideo-oblongis, deorsum conspicue acutatis, 1,5 mm. long., 0,5-0,8 mm. latis; ostiolis obtuso-papillatis, prominulis, centro pertusis; ascis cylindraceis octosporis, parte sporifera 105-120 \approx 11-12; paraphysibus tenuissimis filiformibus; sporidiis monostichis, ellipsoideo-oblongis, leviter inæquilateralibus utrinque rotundatis, 16-18 \approx 7, variantibus usque ad 20 \approx 8-9, fuligineis.

Hab. in ramis emortuis in silva inter Bihunga (1920 m.) et Nakitava (2652 m.) Africæ austr. — Affine *Hypoxylo majusculo* Cooke, sed differt colore jugiter nigro, peritheciis ostiolisque ma-

gis prominulis, sporidiis obtusis, etc. et *H. multififormi*, sed sporidia multo ampliora; ab *H. Buttneri* Henn., recedit stromate multo majore (nec tantum 1 mm. diam.) et sporidiis angustioribus et brevioribus, nec 16-35 \approx 17.

9. ***Hypoxylon apoense*** P. Henn., Hedwigia XLVII (1908) p. 259. — 4408
 Stromatibus hemisphæricis, atris, intus pallidis, rugulosis, opacis, ostiolis prominulis, 1,5-2,5 cm. diam.; peritheciis immersis, globulosis, 0,5-0,8 mm. diam.; ascis pedicellatis, cylindraceis, obtusis, p. spor. c. 140-160 \approx 12-14, 8-sporis, paraphysatis; sporidiis oblique monostichis, oblonge navicularibus obtusis vel acutiusculis, 25-32 \approx 8-12, atris.

Hab. in truncis emortuis, Mindanao Davao, Mt. Apo 2000 m. Ins. Philippin. (COPELAND).

10. ***Hypoxylon congoense*** Sacc., Myc. cong. novi, Anr. Myc. IV (1906) 4409 p. 76. — Late effusum, appланatum sed hypostromate pulvinato crassiuseculo suffultum, intus et extus nigrum sed superficie pruina atro-purpurea conspersum, carbonaceum, peritheciis non vel vix emergentibus fere imperspicue tuberosum; peritheciis densissime stipatis, verticaliter oblongo-cylindraceis, basi acutis, apice obtusis, 1,5 mm. altis, 0,5 mm. latis; ostiolis obsoletis; ascis jam resorptis; sporidiis oblongis utrinque rotundatis, inaequilateris, 16-22 \approx 8-9, atro-fuligineis.

Hab. ad cortices putres, Kisantu Afr. (J. GILLET). — Habitu *Hypoxylon atro-purpureum* fere emulatur sed sporidiis duplo majoribus et peritheciorum forma statim dignoscitur. Pertinet ad sect. *Placoxyton*.

11. ***Hypoxylon albo-tectum*** Rehm in Rehm et Rick, Broteria V (1906) 4410 p. 228. — Stromatibus per corticem erumpentibus, irregulariter expansis, 0,5-2 cm. lat., 1-1,5 mm. cr., atris; peritheciis monostichis aggregatis, ovoideis, 1 mm. diam., plerumque semiglobosis vel globosis, prominentibus, verrucosis, pruina crassa alba preter centrum obtectis, appланatis, tenuiter marginatis poroque minimo pertusis; ascis cylindraceis, longissimis, octosporis; sporidiis elliptico-navicularibus, 1-cellularibus, 2-guttatis, fuscis, strato mucoso tenui obductis, 9-14 \approx 4, monostichis; paraphysibus filiformibus.

Hab. ad ramulum putrem, Torres Vedras Lusitaniæ. — Pruina alba crassa, ut in *Hypo. Bovei*, mox dignoscenda species.

12. ***Hypoxylon abyssinicum*** Sacc. in Ann. Myc. X (1912) p. 312. — 4411
 Effusum, superficiale, nigrum, carbonaceum; peritheciis modo discretis et laxè cohærentibus, globosis, magnis, 2 mm. diam., di-

stincte acute papillatis, modo et multo frequentius 2-6 in soros intermixtos 3-5 mm. diam., alte pulvinatos coalescentibus et ostiolis totidem similibus signatis; ascis cylindricis sensim pedicellatis, apice rotundatis, 150-160 \times 8-10, octosporis, paraphysatis; sporidiis oblique monostichis, oblongo-fusoideis utrinque obtusulis, e latere navicularibus, 28-30 \times 7-9, fuligineis 1-2-guttatis.

Hab. in corticibus putrescentibus in Abyssinia, April 1904 (A. PAPPI) — Ab affini *Hyp. regali* Morg. — Syll. XVII, p. 610 — differt peritheciis majoribus, nunc discretis nunc 2-6-confluentibus, sporidiis paullo longioribus et angustioribus et patria omnino diversa. Pulcherrima species.

13. **Hypoxylon Sancto-Janianum** Ferd. et Winge, Botanisk Tidsskrift 4412 XXIX (1908) p. 14, tab. I, fig. 6. — Stromate superficiali, repando, 0,5 cm. lato, hinc inde obsolete rimoso, margine undulato-tumidulo, irregulari, distincte vero limitato, intus fuligineo-fusco, extus crusta ferruginea, ostiolis peritheciorum obscurioribus punctata tecto, strato subperitheciali fibroso, textura fere daldiniacea instructo; crusta obtegente externe modo ferruginea, interne autem vivide rubra, inter perithecia singula plus minusve profunde penetrante; peritheciis monostichis, densissime stipatis, tubulatis, usque ad $1\frac{3}{4}$ mm. long., $\frac{1}{3}$ mm. cr.; ostiolis levibus, crateriformiter pertusis, crusta obscurioribus eamque papillatim penetrantibus; ascis cylindraceis (?); sporidiis ellipsoideo-subnavicularibus, utrinque rotundatis, e latere leviter compressis, 14,5-19 \times 7-8,5 pluriguttulatis, atro-fuscis.

- Hab.* in insula St. Jean Indiæ occ. (RAUNKIAER). — *Hypoxylon areolato* Starb. affinis species. E sect. *Placoxylon*.
14. **Hypoxylon paulistanum** Speg., Fungi Paul. Rev. Mus. La Plata 4413 t. XV, p. 19 (1908). — Stromatibus erumpenti-superficialibus subparvis pulvinulatis margine obtusis, primo levibus pallide lateritiis dein fuscis squarrulosis punctulatis peritheciis globoso-angulatis 120-150 μ . coriacellis, immersis non v. vix prominulis; ascis cylindraceis parce pseudoparaphysatis, 85-100 \times 14, octosporis; sporidiis ellipsoideo-cymbiformibus, monostichis, opace fuligineis, mediocribus, 20 \times 10, levibus.

- Hab.* in ramulis emortuis adhuc pendulis prope Sao Paulo Brasilia (USTERI). — Species *Hypoxylon fuscum* (Pers.) Fr. peraffinis, ascis a paraphysatis sporisque majoribus distincta.

15. **Hypoxylon Hibisci** P. Henn., Hedwigia XLVII (1908) p. 259. — 4414 Stromatibus subgregarie erumpentibus superficialibus, hemispha-

rico-pulvinatis v. subglobosis 0,5-1 cm. diam., rufo brunneis dein fuscis, opacis, vix ostiolatis, rugulosis; intus fuscis; peritheciis immersis globulosis; ascis cylindraceo-clavatis, pedicellatis 8-sporis, paraphysatis; sporidiis monostichis, ellipsoideis, obtusis, atris, 6-10 \times 3,5-4.

Hab. in ramis siccis Hibisci Rosæ-sinensis, Manila Ins. Philipp. (MERRILL).

16. *Hypoxylon hæmatites* Lév. — Syll. IX, p. 559 — var. *macro-* 4415 *sporum* Theiss., Ann. Mycol. VI (1908) p. 345. — Differt a typo notis microscopicis et stromate basali fortius evoluto, in quo nivalant perithecia saepe discreta; ascis 110-125 \times 16-18, pedicello breviusculo 15-30 μ . longo; sporidiis ellipsoideis, obtusis, nigris, rarius subglobosis, 18-27 \times 12-14.

Hab. ad trunco, Rio grande do Sul, Brasilia.

17. *Hypoxylon collabens* Theiss., Ann. Mycol. VI (1908) p. 346. — 4416 Stromate juventute crasse pulvinato, placentiformi, rubigineo-brunneo, orbiculari v. oblongo, 1 $\frac{1}{2}$ cm. lato, 4-8 mm. alto, levi, haud nitente, maturitate collabente, multo tenuiore, nigrescente; peritheciis emergentibus submammillatis ostiolisque acutis conicis superficiem asperam reddentibus, stipatis, elliptico-globosis, 800 μ . diam. usque ad 1 mm. altis, duris; ascis jam evanidis; sporidiis badiis 18-22 \times 6 $\frac{1}{2}$ -9, hinc obtusis illinc acutis.

Hab. ad cortices in silva, Sao Leopoldo (J. RICK S. J.).

18. *Hypoxylon Kermesi* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 343. — Stromatibus superficialibus subgloboso-depressis v. sublenticularibus, extus aurantiacis dense majusculeque nigro-ostiolatis, intus concoloribus dense perithecigeris; peritheciis densissime constipatis, ellipsoideo-ovovatis, apice late ostiolato-perforatis, carbonaceis nigerrimis 300-400 \times 200-300; ascis mox diffuentibus; sporidiis senescentibus navicularibus opace fuligineis, 12-16 \times 5-9.

Hab. ad cortices truncorum putrescentium in silvis prope Formosa, Rep. Argentina Amer. austr.

19. *Hypoxylon rubiginosum* (Pers.) Fr. — Syll. I, p. 376 — var. *in-* 4418 *signe* Rehm in Strasser, Verh. zool.-bot. Ges. Wien, LVII (1907) p. 323. — A typo differt ascis majoribus (p. sp. usque 120 long.) sporidiis etiam majoribus 20-24 (usque ad 38) \times 10-12.

Hab. in ligno sicco fagineo, Sonntagberg Austriae inf. (P. LAMBEET). — Var. *microcarpum* Speg. An. Mus. Nac. Buenos Aires t. XVII (1908) p. 120. — A typo differt peritheciis dense con-

stipatis ac conspicue minoribus 100-110 μ . diam. — Ad ramos dejectos subputrescentes Ilicis paraguariensis in silvis circ. San Pedro Argentina Amer. austr.

20. **Hypoxylon pulcherrimum** v. Höhn., Ann. Myc. III (1905) p. 187. 4419

— Ita vocandum *Hypoxylon coccineum* Bull. v. *microcarpum* Bizz. (Syll. IX, p. 545) quod, sec. v. Höhnel, ut bona species habendum. *Hypox. microcarpum* Penz. et Sacc. est quoque diversum.

21. **Hypoxylon diatrypeoides** Rehm, Ann. Mycol. V (1907) p. 525. — 4420

Stromatibus ab initio cortice innatis ab eoque rubro-stromatico subtectis, prominentibus, dein prorumpentibus, irregulariter orbicularibus, gregariis, demum cortice secedente fere sessilibus, semiglobosis, 1-4 mm. diam., extus rubro-fuscidulis, ca. 2 mm. altis, subcarnosis, intus rubescensibus, glabris; peritheciis globulosis 5-30 innatis, membranaceis fuscidulo-contextis, monostichis, ca. 0,4 mm. diam., semiglobosis demum prominentibus, interdum fere gregarie exstantibus, rarissime papillulatis, poro conspicuo impresso albido-marginato pertusis; ascis cylindraceis, apice rotundatis, 100-110 \times 15-17, octosporis; sporidiis ellipsoideis, rectis vel subcurvatalis, violaceo-fuscis, 18-20 \times 8, monostichis; paraphysibus ramosis, septatis, 3 μ . cr., gelatinosis.

Hab. ad trunco, Sao Paulo, Brasilia (USTERI). — Stromatibus molliusculis ad Hypocreaceas vergit, habitu vero *Diatrypen* in memoriam revocat.

22. **Hypoxylon ? valsarioides** Speg., Fungi Chilenses (1910) pag. 48, 4421 cum icon. — Stromatibus cortice innato-erumpentibus parvis superne planiusculis levibus, extus fusco-atris, intus aurantio-lateritiis; peritheciis majusculis globosis paucis constipatis substantia stromatica junctis, carbonaceis nigris, obsolete ostiolatis, 1-1,3 mm. diam.; ascis linearibus longe pedicellatis paraphysatis octosporis, 200 \times 5-6; sporidiis monostichis cylindraceo-ellipsoideis grosse uniguttulatis fuligineis, 12 \times 4.

Hab. ad ramos emortuos Perseæ Lingue prope Ciudad de Valdivia, Chile Amer. austr. — Huc pertinet verisimiliter *Hyp. rubricosum* Montagne nec Fries.

23. **Hypoxylon Dieckmannii** Theiss., Ann. Mycol. VI (1908) p. 346. 4422

— Stromatibus pulvinatis, discretis, 1-4 mm. diam. vel undulato-confluentibus, 1-2 mm. altis, margine rotundato, initio purpureo-brunneis, dein decolorantibus fusco-atris vel definite atris, haud nitentibus, sub lente pulveraceo-rugosulis, ostiolis minutissimis pertusis non vel vix emergentibus, poro centrali flavido sub lente

forti solum visibili, intus carbonaceo-duris, atestate fuligineo-pulvraceis; peritheciis stipatis, immersis, ovato-ellipticis, 600 \times 200, collo brevi superficie attingentibus; ascis, non visis; sporidiis oblongo-ellipticis, utrinque rotundatis, fuscis, demum brunnescentibus, initio biguttulatis, 7-9 \times 3-4 $\frac{1}{2}$.

Hab. in cortice duro in silva, São Leopoldo, Brasilia.

24. *Hypoxylon glomerulatum* Theiss., Ann. Mycol. VI (1908) p. 345. — 4423

Peritheciis minutis 300-700 μ . diam. singulis v. paucis aggregatis v. in pulvinulos discretos 3-5 mm. latos stromate parcissimo interjecto confluentibus, primo furfure testaceo-purpureo conspersis, dein nigrescentibus, vertice prominulis, umbilicatis, ostiolo nigro punctiformi dein pertuso; ascis magnis 100-130 \times 12-15, pedicello firme usque ad 40 μ . longo; sporidiis octonis, plano-convexis, rarius recte ellipsoideis, utrinque rotundatis vel subapiculatis, aterrimis, grosse guttatis, 18-23 \times 10-12.

Hab. ad ramulos exsiccatos in silvulis («capao» dictis), São Leopoldo Brasilia. — Ab *Hyp. rubello* Penz. et Sacc. sporidiis lateribus nec fusoideis nec acutis dignoscenda species.

25. *Hypoxylon pumilio* Sacc et Fairm. in Saccardo Micromycet. A- 4424

mer. novi, Journ. of Myc. XII (1906) p. 47. — Minutum, extus e roseo isabellinum, breviter effusum, rarius in acervulos exiguo 1 mm.. latos limitatum, plerumque 4-6 mm. long., 2 mm. lat., applanatum v. vix convexulum; peritheciis unistratosis peregrinis, globulosis vix 200 μ . diam.; medietate superiori discretis, hinc prominulis, extus tenuiter roseo-pruinosis, intus nigris, ostiolo brevissimo lato obtuso, minutissime pertuso, fere deterso hinc nigrante, 90-100 μ . diam., ascis cylindricis deorsum sensim tenuato-stipitatis, apice rotundatis, 130 \times 6-8, parte sporif. 70-80 μ . longa, octosporis; paraphysibus filiformibus ácos multo superantibus; sporidiis oblique monostichis, ovato-oblongis, inaequilateris, 12-14 \times 5,5-6, fuligineis, crasse 2 guttatis, rarius guttulis inaequilibus 3-4 fætis.

Hab. in ligno putri in silvis pr. Lyndonville, New York, Amer. bor. — Nonnihil affine *H. necrioideo* Sacc. et Trotter et *H. necrioides* Speg. a quibus mox dignoscitur peritheciis applanato-effusis, multo minoribus. Stroma, cui perithecia innituntur est maculiforme, pariter roseo-isabellinum. Species pertinet ad subgenus *Placoxylon*, Sect. a.

26. *Hypoxylon rubigineo-areolatum* Rehm in Theiss., Ann. Mycol. VI (1908) p. 345. — 4425

(1908) p. 345. — Äqualiter longe lateque effusum, 1-1 $\frac{1}{2}$ mm.

crassum, vel in glebas dissolutum, primo fusco-crocatum, dein rubigineo-purpureum vel atro-violaceum, ætate nigrescens; peritheciis 500-800 μ . diam. vertice subdepresso delicate papillato, disco interdum applanatulo, anulum minutum efformante; ascis p. sp. 90-115 \times 6-7, pedicello 40-60 μ . longo; sporidiis inter 12-17 \times 5-7 variantibus, oblongis vel plus minus ellipticis, forma inconstanti, rectis curvulisve, 1-2 guttatis, badiis.

Hab. ad ligna emorta corticata et decorticata, São Leopoldo, Brasilia. — Species variabilitate omnium fere partium memorabilis. Forma α : Perithecia ad superficiem stromatis non prominula [tota superficie æqualiter plana apparerter compressa] sed angulato-polygonaliter circumscripta; hinc superficies reticulato-areolata. Forma β : Perithecia supra breviter libera regulariter rotundata; hinc superficies æqualiter colliculosa. Forma γ : sicut β , sed papilla annulō distincto circumdata. — Etiam sporidia mox 12-14, mox 13-17 vel 12-17 μ . longa inveniuntur. *Hyp. janthino* Cooke affine. — Var. **microsporum** Theiss., l. c. — Differt a typo ascis 60-70 μ . longis, sporidiis fuligineis 9-11 \times 4,5. — Cum typo.

27. **Hypoxylon amaniense** P. Henn., Engl. Jahrb. XXXVIII (1905) 4426 p. 115. — Stromatibus hemisphærico- v. oblongo-pulvinatis, atro-carbonaceis, favoso-rugulosis, 6-12 mm. diam., loculis ellipsoideis v. ovoideis, 400-500 \times 300-350, ostiolis umbilicatis; ascis cylindraceis, 5-5,5 μ . cr., paraphysatis; sporidiis 8 oblique monostichis, longe fusoideis, inæquilateralibus, fusco-atris, 18-22 \times 4-5,5.

Hab. in ligno, Amani Ost-Usambara Africæ centr. (EICHELBÄUM). — *Hyp. annulato* Schw. affine, sed stromatibus hmispæricis, sporidiis angustis elongatis diversum.

28. **Hypoxylon rosellinoides** P. Henn., Engl. Jahrb. XXXVIII (1905) 4427 p. 115. — Stromatibus ovoideis v. hemisphæricis pulvinatis, carbonaceo-atris, rugulosis, 1- v. plurimis conico-ostiolatis, 1-2 mm. diam., 1- v. plurilocularibus, loculis subglobosis immersis; ascis cylindraceis c. 200 \times 10-15, paraphysatis; octosporis; sporidiis oblique monostichis fusoideo-navicularibus, atris, 20-28 \times 10-13.

Hab. in ramis corticatis prope Amani Ost-Usambara Africæ centr. (EICHELBÄUM).

29. **Hypoxylon epimyces** Speg. An. Mus. Nac. Buenos Aires t. XIX (1909) p. 344. — Euhypoxylon; stromatibus laxe gregariis superficialibus lenticularibus parvis punctato-verruculosis nigris opacis glabris, intus farctis suberosis albis; peritheciis dense constipatis periphericis, immersis, globosis, minutis, 200-250 μ . diam.; ascis

cylindraceis aparaphysatis, octosporis, 50 \times 4-5; sporidiis ellipsoideo-subnavicularibus, levibus, pallide fuligineis, grosse uniguttulatis 5-7 \times 2-3.

Hab. ad pileos Trametes fibrosæ in silvis prope Formosa Argentina Amer. austr.

30. *Hypoxylon minutellum* Syd., Ann. Mycol. VIII (1910) p. 37. — 4429

Stromatibus superficialibus rotundatis, applanatis, 3-8 mm. latis, 2-3 mm. crassis, centro affixis, atris, rugulosis; peritheciis ca. 20-50 in disco stromatis immersis, ostiolis prominulis; ascis cylindraceis, mox diffluentibus; sporidiis elliptico-navicularibus, fusco-brunneis, continuis, 6-7 $\frac{1}{2}$ \times 3-3 $\frac{1}{2}$.

Hab. ad corticem, Pauáí alt. 2100 m., in provincia Benguet, Luzon, insul. Philipp. (R. C. Mc GREGOR).

31. *Hypoxylon Berterii* Mont. — Syll. I, p. 367 — var. *microstroma* 4430

Theiss., Ann. Mycol. VI (1908) p. 345. — A typo differt stromatibus minoribus lentiformibus 1-4 mm. diam. orbicularibus v. ellipticis, 1-1 $\frac{1}{2}$ mm. altis; ascis 60-70 μ . longis, pedicello usque ad 50 μ . longo; sporidiis opacis obtusulis 11-13 \times 5-6 $\frac{1}{2}$, sæpe irregulariter in asco sparsis.

Hab. ad trunços, Rio Grande do Sul Brasiliæ. — Affinia sunt *Hyp. Dussianum* Pat., *Hyp. cohærens* var. *brasiliense* Starb. et *Hyp. leucocreas* B. et Rav.

32. *Hypoxylon Gilletianum* Sacc., Myc. Cong. novi, Ann. Myc. IV (1906) p. 76. — Stromatibus e globoso hemisphæricis, superficialibus, hinc inde congregatis, non vel vix confluentibus, 6-8 mm. diam., intus extusque opace nigricantibus, carbonaceis, superficie ob perithecia prominula minute colliculosis; peritheciis globosis, 0,5-0,6 mm. diam., ostiolis punctiformibus areola circulari depressa, 200-300 μ . diam. nitidula cinctis; ascis . . . jam resorptis; sporidiis navicularibus, inæquilateris, utrinque acutiusculis, 19-21 \times 6-7, atro-fuligineis.

Hab. in corticibus emortuis, Kisantu, Africæ (J. GILLET). — Ab *Hypoxylon marginato*, *H. annulato* aliisque speciebus areolato-impressis differt stromatis forma et sporidiis multo majoribus; ab *Hyp. malleolo* stromate multo minore.

33. *Hypoxylon Kellermani* Rehm, Ann. Mycol. VI (1908) p. 313. — 4432

Stromatibus in ligno denudato tuberculariformiter sessilibus, semiglobosis, versus basim constrictis, apice plus minusve truncatis, orbicularibus, glabris, nigris, intus albis, 1-3 mm. diam., 1-1,5 mm. altis, carbonaceis; peritheciis usque ad 12 monostiche innati;

0,3 mm. diam., papillula minima conoidea prominente; ascis evanidis; sporidiis unicellularibus, subfuscis, 18-20 \times 10-12.

Hab. ad ramos decorticatos, Columbus Ohio U. St. Amer. bor. (KELLEMAN). — Ab *Hypoxylo atro-rufó* sporidiis amplioribus imprimis recedit.

34. Hypoxylon lilliputianum Syd., Ann. Myc. VIII (1910) p. 37. — 4483

Stromatibus gregariis, rotundatis, ca. 1-3 mm. latis, 1 mm. crassis, primo fusco-brunneis, tandem atris, intus albis, rugulosis; peritheciis ca. 5-25 in disco stromatis immersis, ostiolis prominulis; ascis cylindraceis p. sp. 20-30 \times 3-3 $\frac{1}{2}$, octosporis; sporidiis ellipsoideis, 1-guttulatis, utrinque obtusis, continuis, fuscis, 3 $\frac{1}{2}$ -5 \times 2.

Hab. ad lignum cariosum, Davao, Mindanao in ins. Philippinenibus (E. B. COPELAND).

KRETZSCHMARIA Fr. Syll. IX p. 565, XI p. 287, XIV p. 512, XVI p. 449, XVII p. 614.

1. Kretzschmaria rugosa Earle, Bull. of the New York Bot. Gard. 4484 (1904) p. 311. — Stromatibus usque ad 1 cm. lat., irregulariter globosis v. subdepressis, breviter stipitatis v. subsessilibus, superficie pallide nigra, rugosa, contextu spongioso-fibroso, albo, stipite 2-8 \times 1-2 mm.; peritheciis latis, 1 mm. diam., nigris, globosis, infossis sed prominentibus, monostichis, sparsis, non confertis, ostiolo minuto, punctiformi, inconspicuo præditis; ascis cylindraceis, 150-200 \times 8-10, evanescentibus; paraphysibus tenuibus, filiformibus, 1 μ . cr.; sporidiis monostichis, inæquilateralibus, saepe curvis, primis hyalinis 1- v. 2-guttulatis, dein brunneis, opacis, 25-28 \times 8-10.

Hab. in tranco emortuo in silvis, Molyneaux Estote, Isl. of St. Kitts Amer. bor. (BRITTON et COWELL).

2. Kretzschmaria stilbophora Rehm, Ann. Mycol. V (1907) p. 526. 4485 — Stromate communi late expanso, nigrescente, stilbophoro, crustaceo-membranaceo; stromatibus singularibus arcte congregatis, fere crustaceis, verticaliter constipatis et conglutinatis, obconicis, deorsum angustatis derigatisque, superne convexiusculis, centro papillulatis, primitus strato pruinoso cinereo-argenteo demum deciduo obductis, dein atris carbonaceis, 1 mm. alt., 0,7-0,9 mm. lat., peritheciis oblongis, c. 250 μ . long.; ascis cylindraceis, perlóngis, 8-sporis; sporidiis ellipsoideis, subnavicularibus, 1-cellularibus, fuscis, 10-12 \times 5, monostichis; paraphysibus filiformibus.

Hab. ad ramum arboris frondosæ, Sao Leopoldo, Rio grande do Sul, Brasilia (RICK S. J.). Stilbum elongatum epistromaticum,

facile deciduum, a cl. Rick observatum, sed a cl. Rehm non amplius repertum.

3. **Kretzschmaria mauritanica** (Dur. et Mont.) Pat., Bull. Soc. Myc. 4436 Fr. XXI (1905) p. 120. — Ita vocanda est *Sphaeria mauritanica* Dur. et Mont. seu *Hypoxylon mauritanicum* Dur. et Mont. — Syll. I, p. 371.

XYLOCREA A. Möll. — Syll. XVI p. 451.

1. **Xylocrea elegantissima** Rick, Broteria V (1906) p. 51. — Stroma carnosò-molli, intus albo, extus albo-stramineo, 0,5 cm. diam., globoso, subsessili; peritheciis atris, oblongo-ovatis, 1-2 mm. diam., eminentibus cinctis disco denigrato stromatis, inter se separatis spatiis 1-3 mm. v. etiam approximatis, aliquoties fere superficiabibus; ascis 250 ± 14, pedicellatis; sporidiis limoniformibus 25 ± 12, versus apicem acutis, longitudinaliter striatis, primitus hyalinis, dein guttulatis, atro-brunneis.

Hab. ad gramina adusta, Rio grande do Sul Brasiliæ. — Forsan non bene distinctum ab *Hypoxylo Phœnice* (Fr.) Berk. et Curt.

PENZIGIA Sacc. — Syll. IX p. 567, XIV p. 513, XVI p. 451.

1. **Penzigia Arntzenii** Theiss., Ann. Mycol. VI (1908) pag. 346. — 4438 Stromatibus minutis, opacis, orbicularibus, 1 mm. diam., depresso-globosis, subitus coarctatis, puncto centrali affixis (pseudo-stipite in sectione verticali distinete visibili), 500-700 µ. altis, mollibus, hypocreaceis, intus farctis candidis, extus brunneis haud nitentibus, sub lente ruguloso-granulosis ostiolis paucis nigris vix perspicuis, cortice non duro; peritheciis periphericis, monostichis, immersis, sparsis, minutissimis, 150 µ. diam.; ascis cylindraceis, octosporis, obtuse rotundatis, breviter pedicellatis, aparaphysatis, p. sp. 160-210 ± 17-21, dilutis; sporidiis atris, continuis, late ellipticis, utrinque acutatis v. rotundioribus, gutta una magna præditis, 30-35 ± 12-15.

Hab. ad ramulos sicclos plantæ scandentis in silva, São Leopoldo Brasiliæ. — Ab *Engleromycte* differt peritheciis monostichis, ascis aparaphysatis et cortice non duro. Ab *Hyp. quisquilarum* Mont. et *Hyp. chionostomo* Speg. omnino diversum. An hoc pertineat *Hyp. parvulum* Ces., dubium est. — E sect. *Sarcoxylon*.

2. **Penzigia Schaffneri** v. Höhn., Fragm. Mykol. VII (1909) in Sitzb. k. Ak. d. Wissensch. Wien, CXVIII Abt. I, p. 827. — Stomatibus sessilibus, depresso-globosis, basi contractis, 27 mm. latis, 13

mm. altis, sordide brunneis senioribus nigricantibus, opacis, levibus; crustis fragilibus, carbonaceis, 350-450 μ . cr., extus regulariter reticulatis; ostiolis minutis, hemisphæricis, in verrucis minutis depresso incidentibus; peritheciis ovoido-angulosis, fragilibus, 2 mm. altis, 1,8 mm. latis, nigris; contextu stromatico molli, spongioso radiatim fibroso, non stratoso v. zonato; ascis et paraphysibus solutis; sporidiis nigris, opacis, cylindraceo-fusoideis, apice acutis v. obtusulis, rectis v. curvulis, 26-36 \times 6,5-9.

Hab. in ligno putri Batavia in ins. Java. — *Penz. compunctæ* (Jung.) et *P. fusco-areolata* Rehm affinis.

3. **Penzgia fusco-areolata** Rehm, Ann. Mycol. V (1907) p. 527. — 440
 Stromatibus hemisphæricis vel oblongis, sessilibus, depresso brevissime stipitatis, stipite 1-2 mm. long. et cr., integris, nec lobulatis, nec undulatis, glabris, extus subfuscis, supera parte lineolis atris tenuissimis areolata, 1-1,5 cm. diam., 0,7 cm. altis, subcarbonaceis; peritheciis in stromatis superiore parte nigris, 1 mm. altis, monostichis, globulosis, in quaque areola papillula 1-2 conoidæa, atra, prominente, poro perspicuo pertusis; stromate intus albo, stratoe fibroso; ascis cylindraceis, octosporis; sporidiis fusiformibus, plerumque subnavicularibus, 1-cellularibus, fuscis, monostichis, 12 \times 5.

Hab. ad lignum putridum, Sao Leopoldo, Rio grande do Sul, Brasilia (RICK S. J.). — Affinis *P. compunctæ* sed minutie stromaticis omnino distincta.

4. **Penzgia Polyporus** Starb., Ascom. Schwed. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 32, fig. 24. — Stromatibus pileatis, polyporoideis, applanatis, laccatim nigro-cuticulatis, concentrica sulcatis, centro tuberculatim affixis vel latius matrice adnatis, margine acutiusculo, pulvinatis, undulatim inæqualibus, fusco-furfuraceis, ambitu paullum lobatis, 2-5 cm. diam., circa 1 cm. crassis (specimen maximum 5,5 \times 3,5 \times 1 cm.), textura stratus corticalis carbonacea, intus suberosa, radiante, sericeo-nitida; peritheciis monostichis, cylindraceo-elongatis, mutua pressione angulatis, non prominulis, vix ostiolatis, carbonaceis, circ. 1 mm. altis, $\frac{1}{4}$ mm. diam.; ascis resorptis; sporidiis ellipsoideis, inæquilateralibus plerumque biguttulatis, 7,5-13 \times 3,8-5.

Hab. in trunco humi jacente, pr. Laguna de la Brea, prov. Jujuy, Argentina. — Species perpulchra ad instar Sterei vel Polypori resupinati pileata, textura intus suberosa, radiante, sericeo-nitente, non zonata, recte *Penzgia* adscribenda.

5. **Penzigia seriata** Theiss., Ann. Mycol. VI (1908) p. 347. — Stro- 4442
 matibus cæspitose erumpentibus, in pulvinulos exquisite lobatos confluentibus, 1 cm. circ. diam. vel seriatim dispositis, serie simplici ex stromatibus 10-25 composita v. binis parallelis; stromatibus seriatis, mutua pressione e latere compressis, 2 mm. altis, 3 mm. diam., a latere 1-1 $\frac{1}{2}$ mm., deorsum ad modum stipitis attenuatis v. margine involuto distincte licet brevissime stipitatis; extus primo coccineo-rubigineis, dein brunnescentibus vel fere nigris, pulverulentis, levibus, cuticula et contextu molliusculis, intus fusco-fuligineis; peritheciis periphericis, monostichis, immersis, globosis, minutis, stipatis, ostiolis ætate demum sub lente mammillose nigro-prominulis; ascis cylindraceis, breviter pedicellatis, p. sp. 70-90 \approx 6-7; sporidiis octonis, oblongis, monostichis, lætius fuligineis, guttis 2 specie septatis, 11-13 $\frac{1}{2}$ \approx 3 $\frac{1}{2}$ -4 $\frac{1}{2}$.

Hab. ad cortices in silva, Petropolis Brasiliæ (J. RICK S. J.).

— Comparanda cum *Hyp. ceramichroa* B. et Br.

6. **Penzigia sessilis** Theiss., Ann. Mycol. VI (1908) p. 347. — Stroma- 4443
 tibus sessilibus, depressis, atris, placentiformibus, 2-4 mm. d., 1-2 mm. altis, subtus coarctatis, modice confluentibus, cute dura carbonacea, intus primo albo-farctis, radiato-fibrosis, mox lignescens-tibus ac demum erosis carbonaceis, superficie æquali, levi, opaca, non nitida nec rugosa, ostiolis imperspicuis; peritheciis ovato-globosis, periphericis, monostichis, immersis, stipatis, 500-900 μ . diam. carbonaceis; ascis dilutis, cylindraceis, 140-170 μ . longis; sporidiis opacis, utrinque acutis vel saltem angustatis, rectis vel plano-convexis, inter 28-38 \approx 7-12 variantibus, typice 30-32 \approx 9-10.

Hab. ad lignum corticatum in silva Sao Leopoldo, Brasilia.

DALDINIA De Not. et Ces. — Syll. I p. 393, XI p. 288, XVI p. 449, XVII p. 616.

1. **Daldinia corrugata** Pat. et Har., Bull. Soc. Myc. Fr. XXII (1906) 4444
 p. 120. — Minuta 5-10 mm. lata (rarius 20 mm.), gregaria; stromate subgloboso, brunneo-atro, carbonaceo, glabro, superficie plicato-corrugata, ostiolis vix punctato, intus albido zonis concentricis brunneis numerosis notato, crustula tenui, atra insidente; peritheciis periphericis immersis, ovoideis; sporidiis ellipsoideis, fuligineis, rectis, 9 \approx 4.

Hab. ad lignum in Africa orientali (Herb. Mus Paris.).

2. **Daldinia platensis** Speg., An. Mus. Nac. Buenos Aires t. XIX 4445
 (1909) p. 345. — Stromatibus hinc inde laxe gregariis subhemi-

sphæricis 1-2 cm. diam., 6-7,5 mm. alt., duris carbonaceis, atris opacis levibus v. vix colliculosis, intus dense concentrica crassiusculaque septatis, interstitiis medulla fibrillosa cinerea repletis; peritheciis periphæricis dense constipatis non prominulis obsoletissime minutissimeque papillato-ostiolatis, obpiriformibus 0,75 mm. alt., 0,50 mm. diam., nigris, coriacellis; ascis cylindraceis longissime pedicellatis, paraphysatis, 170-200 \times 8; sporidiis navicularibus 8-10 \times 5, non v. minute biguttulatis, fuligineis.

Hab. ad trunco dejecto putrescente in umbrosis Parque de La Plata Rep. Argentina, Amer. austr. — *Dald. concentrica* affinis, sporidiis minoribus notisque nonnullis aliis distincta videtur.

3. ***Daldinia granulosa*** Speg., An. Mus. Nac. Buenos Aires t. XIX 4446 (1909) p. 345. — Solitaria v. hinc inde subcæspitosa, nigra; clavulis e cylindraceo clavulatis 1,5-4 cm. long., 8-12 mm. diam., apice obtusis ubique fertilibus, dense minuteque granulosis, stipite glabro; peritheciis globulosis 400-600 μ . diam., carbonaceis obsoletissime ostiolatis; ascis cylindraceis mox diffluentibus; sporidiis eximie navicularibus, 8-11 \times 6, opace fuligineis.

Hab. ad trunco putrido in silvis secus Rio Pescado, Jujuy Rep. Argentina Amer. austr.

4. ***Daldinia argentinensis*** Speg. — Syll. XVII, p. 616 — var. *sessilis* 4447 Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 345. — A typo stiptitis defectu recedit.

Hab. ad ramos dejectos putrescentes in silvis secus Rio Pescado Argentina Amer. austr.

5. ***Daldinia barbata*** Rick, Broteria V (1906) p. 50. — Stromate pul. 4448 vinato, usque ad 5 cm. diam., sœpe lateraliter ad modum *Fomitidis* protracto, ferrugineo-purpureo, pruinato; ascis pedicellatis, parte spor. 50 \times 6; sporidiis atro-filigineis, curvulis, 10 \times 4, uniserialibus, paraphysibus filiformibus.

Hab. ad trunco Rio grande do Sul Brasiliæ. — Exsiccando et jam in statu naturali tegitur totus fungus filamentis multis atris, longissimis, ex sporarum massa formatis, hinc barbatus.

6. ***Daldinia stratosa*** Sacc. Ita nuncupandum *Hypoxylon stratosum* Sacc. — Syll. IX, pag. 544 — a *Daldinia Escholtzii* (Ehrenb.) Rehm — Syll. XVII, p. 617 — præsertim sporidiis fere dimidio angustioribus distinguendum.

NUMMULARIA Tul. — Syll. I p. 395, IX p. 569, XI p. 288, XIV p. 513, XVI p. 1129, XVII p. 618. — Teste P. Theissen in Ann.

Mycol. VI p. 92 (1908) *Diatrypeopsis saccata* Speg. — Syll. IX, p. 480 — collidit cum *Nummularia punctulata* (B. et Br.) Sacc.

1. **Nummularia philippinensis** Ricker, A List Philipp. Fungi in Phil. 4449 lipp. Journ. of Science, I, Suppl. IV (1906) p. 280. — Stromate primum epidermide tecto sed mox erumpenti et libero, convexo, oblongo-ovato, nigro, 4-6 \times 1,5-2,5 cm.; peritheciis cylindricis, nigris, arce stipatis, 1,5 mm. circ. alt.; ascis cylindraceis, 170-185 \times 12-15; sporidiis monostichis, ellipsoideo-oblongis, primum subhyalinis sed mox opacis, 25-28 \times 11-14.

Hab. in ligno humifuso, Luzon, Prov. Bataan, Lamao, in ins. Philippin. (MERRILL).

2. **Nummularia Artocarpi** Pat., Bull. Soc. Myc. France XXII (1906) 4450 p. 56. — Stromate peridermio nigricante emergente fere superficiali liberoque, orbiculari, 3-8 mm. diam., 1-2 mm. cr., plano v. depresso, obtuse marginato, inferne attenuato, brunneo-atro, intus albo; peritheciis stromate immersis, numerosis, monostichis, ovoides, ostiolis poro angusto pertusis haud prominentibus; ascis cylindraceis, stipitatis, 8-sporis, parte spor. 75 \times 8, filiformi-paraphysatis; sporidiis brunneis, ovoides, simplicibus, saepe inaequilateralibus, biguttulatis, 10-12 \times 5-6.

Hab. in cortice Artocarpi speciei indeterminatae in Polynesia. 4451

3. **Nummularia luteo-viridis** Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) pag. 58. — Stromatibus cortice immersis v. disco nitido nigro 2-3 mm. lato ex ostiolis asperato, erumpentibus, cortici arce adnatis, globosis, piriformibus vel cuboideis 3 mm. altis, extus mycelio flavo-viridi vestitis, solitariis v. pluribus aggregatis; ligni superficie viridi-flava; peritheciis pluries seriatis, globosis v. piriformibus, saepe ob mutuam pressionem irregularibus; ascis tenuibus, octosporis, cylindraceis, supra rotundatis, basi in pedicellum acutatis, 50 \times 5; sporidiis late ellipsoideis, oblique monostichis vel irregulariter distichis, primum biguttulatis, unilocularibus, griseo-brunneis, 4-5 \times 2; paraphysibus hyalinis, numerosissimis, filiformibus, guttulatis, ascos superantibus.

Hab. in ramis putrescentibus Quercus sp. prope Rathenow Germaniae. — *N. luteæ* (Alb. et Schw.) affinis sed magnitudine et stromatis structura diversa.

4. **Nummularia oospora** Vouaux, Bull. Soc. Mycol. Fr. XXVI (1910) 4452 p. 155. — Stromate basi ligno innato, peridermio immerso, disco erumpente, postea in ligno decorticato superficiali, orbiculari vel ovali, 5-10 mm. longo 2-3 mm. cr., toto nigro; disco cupulato

ostiolisqne peritheciorum punctulato; peritheciis numerosis, densissime stipatis fereque cylindricis; ostiolis brevibus, poro angusto pertusis, vix prominulis; ascis non visis; sporidiis late ovoideis, fuscis, opacis, 16 \times 11.

Hab. in ligno putrescente, Nouméa, Nova Caledonia (CACOT). 4453

— A *Num. macrospora* Pat. sporidiis multo minoribus distincta.

5. **Nummularia gracilenta** Syd., Ann. Mycol. VIII (1910) p. 37. — Stromatibus determinatis, orbicularibus, planis, immersis, $1/2$ -1 cm. diam., ca. $1/2$ mm. crassis, duris atris; peritheciis sphæroideis, immersis, 200-250 μ . diam.; ostiolis minutissimis, punctiformibus, vix elevatis, atris; ascis cylindraceis, p. sp. 40-50 \times 3, octosporis; sporidiis monostichis, ellipsoideis vel inaequilateralibus, continuis, fuscis, 4-5 \times $2\frac{1}{2}$ -3.

Hab. in ramis emortuis corticatis in silva Dumaguete, Cuernos 4454 Mts., Province of Negros oriental, Talamtum (A. D. E. ELMER).

6. **Nummularia asarcodes** Theiss., Ann. Mycol. VI (1908) p. 349. — Stromatibus applanatis tenuibus, vix 1 mm. crassis, irregulariter discreto-effusis, sinuosis, cortice arcte cinctis, margine recto, superficie primo griseis atro-punctatis, dein plumbeo-fuligineis nigrescentibus, sordide pulverulentis, ætate subnitentibus, ostiolis pertusis annulatis vix perspicuis, intus carbonaceo-duris; peritheciis oblongo-ellipsoideis, 700 \times 300, stipatis; ascis p. sp. 80-90 \times 6-7; sporidiis ellipticis, rotundatis, opacis, 11-13 $\frac{1}{2}$, \times 6-6 $\frac{1}{2}$.

Hab. ad truncos vetustos corticatos, São Leopoldo Brasiliæ. — Secundum Rehm *N. Bulliardii* affinis, colore griseo-plumbeo tamen diversa; præterea differt stromatibus tenuibus applanatis sporidiisque minoribus.

7. **Nummularia Bulliardii** Tul. — Syll. I, p. 396 — *Nummularia anthracina* (Schw.) — Var. *tiliacola* Rehm, Ann. Mycol. VII (1909) pag. 532. — Stromatibus emergentibus, cortice demum delapo primitus marginatis, 10-20 cm. long., 1-3 cm. latis, cinereo-nigris, versus marginem subalbidulis, subrugulosis, ostiolis minutissimis haud prominentibus punctulatis; ceterum ut in *N. Bulliardii*.

Hab. in truncis Tiliæ americanæ, Riverside Illinois Amer. bor. (E. T. et S. A. HARPER). — Var. *stenosperma* Theiss., Ann. Mycol. VI (1908) p. 350. — Irregulariter oblongo-effusa vel exquisitie interrupte sinuosa, aterrima pulverulenta, ostiolis pertusis minutis vix elevatis signata; ascis breviter pedicellatis p. sp. 65-85 \times 6-7; sporidiis fusco-brunneis ellipticis 9-13 \times 5-6 $\frac{1}{2}$. — Ad truncos in Brasilia.

8. *Nummularia cincta* Ferd. et Winge, Botanisk Tidsskr. XXIX 4456

(1908) p. 15, tab. II, fig. 1. — Stromate per corticem erumpente ejusque lacinis erectis arcte cinto, pulvinato vel placentiformi, margine angusto, tumidulo, circuitu orbiculari v. parum elongato, 2-6 cm. (et ultra?) diam., 2-15 mm. cr., fusco, intus concolor, textura subcoriacea; peritheciis periphericis, monostichis, dense stipatis, cylindraceis v. subovoideis, circ. 1 mm. long., $\frac{1}{5}$ - $\frac{1}{2}$ mm. cr.; ostiolis minutissimis, oculo nudo vix conspicuis, discoideo-papillulatis, poro lato pertusis, in speciminibus vetustis oblitteratis; ascis linearis-cylindraceis, apice rotundatis, in pedicellum longissimum, fragilem leviter attenuatis, parte sp. 95-105 \approx 6-7, poro jodo cærulecente; sporidiis octonis, monostichis, ellipsoideis v. ellipsoideo-fusiformibus, verrucosis, 13-15 \approx 5-6,5, singulatim brunneolo tinctis, acervatis brunneis; paraphysibus validis, septatis, basi circ. 6 μ . cr., sursum leniter attenuatis, ascos longe superantibus.

Hab. ad ramos corticatos in insulis Hispaniola et St. Jan Indiæ occ. (RAUNKIAER).

9. *Nummularia clypeus* (Schw.) Cooke — Syll. IX, p. 570 — var. 4457 *macrospora* Theiss., Ann. Mycol. VI (1908) p. 349. — Stromatibus discretis 3-8 mm. diam., convexo-planis vel latius confluentibus et magis applanatis, sœpe linearis-elongatis, nitentibus; ascis 140-165 \approx 10-12 p. sp.; sporidiis 22-28 \approx 10-12.

Hab. in truncis ramisque corticatis, São Leopoldo, Brasiliae.

10. *Nummularia commixta* Rehm — Syll. XVII p. 618 — Var. ap. 4458 *planata* Theiss., Ann. Mycol. VI (1908) p. 35; VII (1909) p. 13. — Differt a typo stromatibus æqualiter applanatis non convexis, vix 600 μ . crassis, aterrimis, nitentibus, ostiolisque non impressis, superficiem æqualiter hemisphærice punctulatibus (sine fossulis); stromatibus 3-30 mm. diam.; ascis breviter pedicellatis p. sp. 200-220 \approx 10-12; sporidiis hyalinis utrinque attenuatis 25-32 \approx 7,5.

Hab. ad ligna dura corticata, São Leopoldo Brasiliae. — Var. *minor* Rehm ap. Theiss. in Ann. myc. VII (1909) p. 13. — Differt stromatibus minoribus 3-10 mm. diam., absentia fossularum in disco sporidiisque minoribus 20-26 \approx 7-9, hyalinis. — Cum var. præcedente.

11. *Nummularia diatrypoides* Rehm, Ann. Mycol. V (1907) p. 527. 4459

— Stromatibus gregariis, ramulum ambientibus, primitus innatis, dein per corticem erumpentibus ab eoque tenuiter marginatis, orbicularibus, rarissime oblongis, supra corticem exstantibus, in ligno linea nigra circumscriptis, sessilibus, planis, atris, carbonaceis,

2-3 mm. diam.; peritheciis c. 12 innatis, monostichis, globulosis, 0,3 mm., papillulis in stromatis superficie vix conspicuis; ascis subcylindraceis, tenerrimis, c. 180 \times 50 octosporis; sporidiis ellipsoideis, 1-cellularibus, subfuscis, strato tenuissimo mucoso obductis, 35 \times 20, 1-2-stichis; paraphysibus filiformibus septatis, 5-6 μ . crassis.

Hab. ad ramum, Rio grande do Sul, Brasilia (RICK S. J.). — *Habitus omnino Diatrypes.*

12. **Nummularia divergens** Theiss., Ann. Mycol. VI (1908) p. 349. — 4460
 Stromatibus in ligno denigrato orbicularibus 4-10 mm. diam. vel irregulariter expansis, nigro-brunneis, convexo-planis, margine indistincto, vix 1 mm. crassis, superficie sub lente granuloso-asperulatis, ostiolis hemisphæricis minutis sparse punctulatis, carbonaceo-duris; peritheciis minutis, stipatis, ovatis, durissimis; ascis non visis; sporidiis atris, continuis, urceolatis, hinc recte truncatis, illic rotundato-angustatis, appendicula hyalina præditis, irregulariter guttulatis, laciniis mucosis tectis, 17-23 \times 6-8,5.

Hab. ad trunco corticatos, Sao Leopoldo Brasiliæ.

13. **Nummularia dura** Ferd. et Winge, Botanisk Tidsskr. XXIX (1908) p. 15, tab. II, fig. 2. — Stromate per corticem erumpente, plano, supra superficiem corticis vix surgente, margine sterili, tecto, ambitu fere orbiculari, 1,5-3 cm. (et ultra ?) diam., tenuissimo, intus extusque nigerrimo, glabro, foveolis irregulariter dispersis circ. 2-3 mm. diam. instructo, textura carbonacea, durissima, picem aridam in memoriam revocante; peritheciis monostichis, densissime constipatis, tubularibus, $\frac{3}{4}$ -1 mm. long., circ. $\frac{1}{5}$ mm. cr.; ostiolis pustuliformibus, minutissimis, lente sola conspicuis; ascis cylindraceis, apice rotundatis jodoque cærulescentibus, breviter pedicellatis, parte sp. 125-135 \times 7,5-8; sporidiis octonis, monostichis, e dorso oblongo-ellipsoideis v. ellipsoideo-fusoideis, e latere inæquilateralibus v. navicularibus, nonnullis subcurvatis, 18-22 \times 6,5-7,5, pellucido-fuscidulis; paraphysibus filiformibus, longis, sursum attenuatis, guttulatis.

Hab. ad lignum corticatum arborum in insulis St. Croix et St. Thomas Indiæ occ. (RAUNKIAER).

14. **Nummularia Fuckelia** Theiss., Ann. Mycol. VI (1908) p. 350. — 4462
 Stromatibus erumpentibus, primo cortice cinctis, dein subsuperficialibus pulvinato-liberis, orbicularibus, 2-6 mm. diam., 1-1 $\frac{1}{2}$ mm. crassis, margine fusco oblique adscendente, disco atro rotundato-applanato vel obsolete marginato, levi, vix sub lente ostiolis cre-

berrimis annulatis minutissimis notato; peritheciis stipatissimis, ovato-angulatis, durissimis, 200-300 μ . diam.; ascis p. sp. 95-110 \times 6; sporidiis hyalinis utrinque acutis, rectis vel plano-convexis, 12-15 \times 5-5 $\frac{1}{2}$.

Hab. ad cortices, São Leopoldo Brasiliæ. — Ad gen. *Anthostoma* quoque vergit. Ubi sporidia jugiter hyalina, vix *Nummulariae* species.

15. **Nummularia maculata** Theiss., Ann. Mycol. VI (1908) p. 348. — 4463
Stromatibus determinatis, orbicularibus vel plus minus irregulariter ellipticis, rarius confluentibus, 3-15 mm. diam., rarissime linearie-elongatis, planis vix pulvinatis, $\frac{1}{2}$ -1 mm. cr., primo griseis, dein fusco-griseis, maculis orbicularibus nigro-pulveraceis, ætate confluentibus conspersis, margine nigro acutiusculo, intus primo cinereis, ætate atris, non duris; peritheciis oblongo-cylindricis cum ovalibus mixtis, ostiolis in mediis maculis sitis, pertusis, minimis; ascis cylindraceis p. sp. 45-58 \times 3 $\frac{1}{2}$ -4, pedicello 30-90 longo μ ; sporidiis griseo-fuscellis oblongis, biguttulatis, rotundatis 5 $\frac{1}{2}$ -7 \times 2-2 $\frac{1}{2}$.

Hab. in ligno emortuo corticato, São Leopoldo, Brasilia. — Affinis *N. Mællerianæ* P. Henn.

16. **Nummularia punctato-brunnea** Theiss., Ann. Mycol. VI (1908) 4464 p. 348. — *Stromatibus orbicularibus vel plus minus irregulariter ellipticis, subpulvinatis vel planis, 2-8 mm. diam. $\frac{1}{2}$ -1 mm. cr., margine indistincto sterili, superficie testacea, ætate sordide brunnea v. nigrescente, ostiolis atris, punctiformibus vix elevatis, pertusis picta, intus atris, non duris; peritheciis immersis ovalibus 500-700 μ . diam.; ascis p. sp. 50-60 \times 4-5, pedicello elongato usque ad 100 μ ; sporidiis ellipticis rotundatis, sordide fuscis, 6-8,5 \times 2,5-3,5.*

Hab. in ligno corticato, São Leopoldo Brasiliæ. — *Num. maculata* valde affinis; vetusta vix discernenda; specimina typica vero margine indistincto, defectu macularum facile distinguenda. Secundum Rehm insuper differentia constat in eo quod porus ascorum jodo cœrulescit, non vero speciei præcedentis. — Var. *variabilis* Theiss. l. c. Differt a typo colore fuligineo-brunneo sporidiisque fuligineis variabilibus, typice 8-9 \times 4, saepius in ascis usque 15-18 μ . elongatis intermixtis regularibus. — Cum typo.

17. **Nummularia pezizoidea** P. Henn. — Syll. XVII p. 618. — var. 4465 *fuliginea* Theiss., Ann. Myc. VII (1909) p. 12. — A typo differt

superficie non atro-nitente sed pulverulento-fuliginea, habitu magis quam characteribus diversa.

Hab. ad trunco in Brasilia Americæ austr.

18. **Nummularia sinuosa** Theiss., Ann. Mycol. VI (1908) p. 349. — 4466

Stromatibus aterrimis, pulverulento-opacis, orbicularibus 2-5 mm. diam. in figuræ exquisite interrupte sinuosas confluentibus, vix 1 mm. crassis, margine acute determinato, intus durissimis, atris; peritheciis ovatis, angulatis, minutis, parietibus durissimis, nitentibus, stipatis; ostiolis depressis minutissimis vix perspicuis; ascis p. sp. 140-170 \times 10-12, pedicello brevissimo; sporidiis atris utrinque subacute, grosse 1-guttatis, 28-35 \times 9-11.

Hab. in ligno duro corticato, São Leopoldo Brasilie.

19. **Nummularia Theissenii** Syd. in Theissen, Ann. Mycol. VII (1909) 4467 p. 344. — Stromate epidermide fusco-brunnea primo tecto, late effuso, continuo v. formis exquisitis sinuoso-interrupto et labyrinthiformi, juventute fusco-atro, glabro, subnitenti, ætate pulverulento-opaco, piceo-atro, semper acute marginato, applanato, vix 1 mm. cr., ostiolis vix conspicuis, ætate griseo-punctiformibus pertusis; peritheciis stipatissimis, contextu duro, nigro-nitenti, ovato-polygonatis, minutis; ascis cylindraceis, breviter pedicellatis, supra rotundatis, 8-sporis, p. sp. c. 85-110 \times 7-8; pedicello 12-35 μ . longo; sporidiis monostichis, fusco-brunneis, ellipsoideis v. oblongis, utrinque angustato-rotundatis, rectis, irregulariter (typice 2-) guttulatis, 12-18 \times 5-6,5.

Hab. in corticibus São Leopoldo Rio Grande do Sul, Brasilie.

— *Numm. anthracodi* (Fr.) Cooke affinis.

20. **Nummularia viridis** Theiss., Ann. Mycol. VI (1908) p. 350. — 4468

Stromatibus flavo-viridulis, dein viridi-fuligineis, margine lætiore flavidulo, tenuissimis, vix 400 μ . crassis, ambitu orbiculari 5-10 mm. diam., rarius confluentibus, planis, non elevatis, superficie ostiolis atris minutis punctata, contextu molliusculo; peritheciis penitus immersis, ovatis, atris c. 250 μ . diam.; ascis gracilibus cylindraceis p. sp. 60-75 \times 5-6 $\frac{1}{2}$, pedicello 35-55 μ . longo; sporidiis obscure brunneis, biguttulatis, ellipticis, rectis, 6 $\frac{1}{2}$ -9 \times 3-3 $\frac{1}{2}$.

Hab. ad ligna subputrida in locis periodice inundatis (« banhados » dictis) São Leopoldo Brasilie. — Linea viridis per lignum excurrit.

21. **Nummularia Starbäckii** Sacc. et Trav. — Syll. XX, p. 203 — 4469

Nummularia tenuis Starb., Ascom. Schwed. Chaco-Cordill. Exp., Arkiv. f. Bot. Bd. V (1905) p. 31, fig. 23 a-b, non Pass. — Stro-

matibus sparsis vel gregariis, interdum confluentibus, plane irregulariter determinatis, plerumque longitudinaliter attenuatis, margine arcuato vel lobato, tenuissimo, peridermio vix protuberante, lilacino-griseo, rugosiusculo diu tectis, denique, illo secedente, nigris, superficie tota eleganter parallele striata, tenuissima, textura carbonacea, latiuscule effusis; peritheciis monostichis, dense constipatis et mutua pressione difformibus, plerumque sphærioideo-oblongatis, ostiolis discoideo-conicis, saepe umbilicatis vel acutiuscule et gibberose marginatis, fere patelliformibus sparsim prominentibus, minutis; ascis octosporis, cylindraceis, sursum rotundatis vel rotundato-detruncatulis, plus minusve unifoveolatis, fere sessilibus, $100 \times 8-9$; jodi ope areola cuboidea sursum cœrulescente; sporidiis monostichis, ellipsoideis, utrinque plerumque acutiusculis, interdum rotundatis, saepe guttulatis, fuscis, $12-14 \times 6-7,5$; paraphysibus vix ramosis, filiformibus, ascis superantibus.

Hab. in ramis humi jacentibus pr. Laguna de la Brea, prov. Jujuy, Argentina et in Gran Chaco Boliviæ. — Quoad habitum cum *N. microplaca* et *N. hypophlæa* valde congruens, partibus internis autem satis differt; a *N. exutante* cui maxime affinis, forma stromatum, peritheciis satis diversa.

USTULINA Tul. — Syll. I p. 350, IX p. 542, XI p. 285.

1. *Ustulina microsperma* Trav., Fl. it. crypt. Pyren. (1906) p. 37 (ex 4470 err. *U. microspora*). — Stromate superficiali, subeffuso, irregulatiter convexo-pulvinato, undulato, 2-3 cm. et ultra diam., 2-10 mm. cr., carbonaceo-fragili, extus æneo-nigricanti, intus nigro; peritheciis majusculis, globoso-ovoideis, 1 mm. usque diam., monostichis, stipatis, crusta stromaticæ crassa tectis; ostiolis prominulis, punctiformibus, obtusiusculis; ascis cylindraceis, pedicellatis, p. sp. 90-100 \times 7-8, paraphysibus filiformibus paucis obvallatis; sporidiis oblique monostichis, ellipsoideo-fusoideis, saepe parum inæquilateris, nigricantibus, 14-16 \times 5-6, guttulatis.

Hab. ad corticem *Quercus*, Selva Pisana et Apennino Pi-stojese Italia centr. — Ab *U. maxima* (Web.) Wetts. pluribus notis diversa.

2. *Ustulina pyrenoerata* Theiss., Ann. Mycol. VI (1908) p. 347. — 4471 Late pulvinato-effusa, e fusco lurido-nigra, durissima, intus æneo-nitens, stratis tribus distinctis: basali compacto atro-nitente, superiore verticaliter fibroso, medio pyrenophoro rufo-brunneo fibroso; superficie ètate eroso-perforata; peritheciis maximis, irre-

gulariter depressis, cylindraceo-globosis, 3-5 mm. altis et latis, extus luride brunneo-sericeo-vestitis, parietibus durissimis atris nitentibus, ostiolo angusto stratum corticale perforante, intus massa glutinosa farctis; ascis non observatis; sporidiis giganteis, atris, continuis, ellipticis, utrinque rotundatis, junioribus 35-60 \times 20-25, vetustioribus 70-110 \times 40-55 variantibus. [Intermixtæ inveniuntur sporæ hyalinæ continuæ elongatæ, rectæ vel curvulæ, guttulatæ, 20-24 \times 6-7].

Hab. ad corticem crassum in silva, São Leopoldo Brasilia (Dr. RICK S. J.). Recedit ab *Ustul. macrosperma* (Mont.) Sacc. forma late pulvinato-effusa, peritheciis non oblongis sporidiisque majoribus non cymbiformibus. A typo generis nonnihil recedens.

3. ***Ustulina maxima*** (Weber) Wettst. in Verb. zool.-bot. Gesellsch. 4472 Wien (1885) p. 592. — Ita vocanda, prioritatis causa, *Sphaeria maxima* Weber, *Ustulina vulgaris* Tul. — Syll. I, p. 351.

PORONIA Willd. — Syll. I p. 348, IX p. 542, XI p. 285, XVI p. 451, XVII p. 620.

1. ***Poronia ? cælata*** Pat., Bull. Soc. Myc. de Fr. XXII (1906) p. 57. 4473 — Stromate erecto, simplici, stipite subcylindraceo, 7 cm. longo, apice 1 mm. cr., basim versus regulariter incrassato, longitudinaliter striato, vix squamuloso, inferne villoso, extus sordide brunneolo, intus flavescente, apice in discum placentiformem, 6 mm. diam. lutescentem superficie cælatum dilatato; contextu subcitrino, molli, ex hyphis 10 μ . latis formato; peritheciis sporidiisque non visis.

Hab. in ligno putrido, Tahiti Polynesiaæ.

2. ***Poronia macrospora*** Peck, Bull. Torr. Bot. Cl. XXXIII (1906) 4474 p. 220. — Stromate 0,75-1,5 cm. lato, irregulari, late ovoideo v. depresso globoso, stipitato, ostiolis nigris v. nigricantibus leniter prominentibus punctato, rubro-brunneo v. nigro-brunneo, intus albo; stipite irregulari, flexuoso, angusto, simplici v. apice parce subramoso ibique saepe incrassato, basi crispato-tuberculato et perforato, brunneo-nigro, intus albo; peritheciis immersis, nigris, ostiolis pallidioribus; sporidiis magnis, ellipsoideis, primum hyalinis et muco involutis, pallide coloratis, 40-60 \times 20-30.

Hab. in sabulosis in horto, New Haven Connect. Amer. bor. (P. W. GRAFF).

STILBOHYPOXYLON Theiss. Ann. Mycol. VI (1908) p. 344 (Etym.

Stilbum et *Hypoxylon*). — Stroma conidiophorum subulatum, stilbiforme; stroma ascophorum subglobosum sessile v. substipitatum ad basim stromatis conidiophori (quod interdum ascophorum percurrit et apice mucronatum reddit). Ascii octospori elongati; sporidia ellipsoidea, continua, brunnea.

1. **Stilbohypoxylon Rehmii** Theiss., Ann. Mycol. VI (1908) p. 344. — 4475
Stromate conidiophoro subulato usque ad 2 mm. alto, basi atra subdilatata, sursum cinereo-pallido, apice æquali vel subcapitato; stromate pyrenophoro globoso sessili vel subtus stipitiformi-attenuato, 700-950 μ . diam. vel depresso 600 μ . alto, atro-griseo, rugoso v. verruculosu, intus subcarnoso candido, apice (stromate olim conidiophoro percurrente) breviter mucronato, ostiolis atris vix perspicuis; peritheciis paucis, minimis, sparsis, immersis, atris; ascis cylindricis p. sp. 75-100 μ . longa, pedicello 35-50 μ . longo; sporidiis octonis brunneis, subdistichis, ellipticis, continua, obtusis vel hinc inde subapiculatis, gutta una magna vel pluribus praeditis, 16-22 \times 7-9.

Hab. in ramulis emarcidis plantæ scandentis in silva, Sao Leopoldo, Brasilia.

SPIROGRAMMA Ferdin. et Winge, Vidensk. Meddel. fra den naturh. Foren. Kiobenhavn (1908) p. 142 (Etym. ex lineola spirali sporidiorum). — Stroma subpulvinatum, per corticem erumpens, strato externo tenui, carbonaceo, fusco-nigro, intus medullaceum, niveum; perithecia in singulo stromate pauca, medulla nivea immersa, ostiolis vix exsertis praedita; ascii 8-spori, paraphysati; sporidia forma gen. *Hypoxyli*, eseptata, maturitate fusca, lineola spirali (germinationis?) lucida circumscripta. — Genus habitu fere sectionis *Clitoxylī*, generis *Hypoxyli*, ad *Xylariam* reapse propius accedens, characteribus autem distinctis, partim sporidiorum, partim stromatis satis diversum.

1. **Spirogramma Boergesenii** Ferdin. et Winge, Vidensk. Meddel. fra den naturh. Foren. i. Kiobehavn (1908) p. 143, tab. IV, fig. 3. — Stromatibus ligno insidentibus, per corticem erumpentibus, semigloboso-pulvinatis, rugulosis, ad basim constrictulis, densiuscula, nonnumquam subseriatim dispositis, raro 2-4 confluentibus, strato externo tenui, carbonaceo, fusco-nigro, intus medullaceis, niveis, 1-2 mm. diam. ad 1 mm. alt.; peritheciis in singulo stromate 2-6, in medulla interiore immersis, pro ratione maximis, globosis, in-

terdum mutua pressione angulatis, circ. $\frac{1}{4}$, mm. diam., submonostichis, nonnumquam minoribus intermixtis; ostiolis vix exsertis, sub lente etiam ægre conspicuis; ascis cylindraceis, superne incrassatis, rotundatis, poro jodi ope intense cærulescente, 5-6 \times 3, inferne in pedicellum fragilem usque ad 90 μ . longum leniter attenuatis, parte sp. 120-140 (plerumque 125) \times 10-14; sporidiis octonis, superne oblique, inferne subrecte monostichis, e dorso visis oblongis v. elongato-ellipsoideis, e latere curvulis, utrinque rotundatis, 21-24 \times 7-8, juvenilibus guttulatis, translucido-flavis, maturis continuis v. rarius plasmate irregulariter partito, fuscis, lineola (? germinationis) spirali, tenui, sub vitro flava, quæ antice in dorso oritur, sporidium semel sinistrorum ambit, ideoque postice in dorsum iterum pervenit ornatis; paraphysibus longis, tenuibus, evanidis.

Hab. ad ramos sicclos arborum in insulis St. Croix et St. Jan Indiæ occidentalis (F. BOERGESEN).

XYLARIA Hill — Syll. I p. 309, IX p. 523, XI p. 283, XIV p. 504, XVI p. 442, XVII p. 622.

I. *Xyloglossa*.

1. **Xylaria polymorpha** (Pers.) Grev. — Syll. I, p. 309. — var. *com-⁴⁴⁷⁷* *binans* Peck, New York State Mus. Bull. n. 116 (1907) p. 33. — Stromatibus subglobosis, saepè compressis et irregularibus, in apice ramorum e terra surgentibus cæspitosis; peritheciis et sporidiis ut in typo.

Hab. in radicibus v. caulinis emortuis, Bridgeport Ct., Amer. bor. (P. W. GRAFF). — Ob stromata globosa et cæspitosa a varietatibus *Xylaria Hypoxylon* et *X. spathulata* differt.

2. **Xylaria subinvoluta** v. Höhnel, Ergebniß Bot. Exp. Südbras. 1901, *4478* Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) extr. p. 27. — Stromatibus solitariis, raro 2 basi adnatis, cylindraceo-clavatis, siccis plerumque subcompressis, 15-40 mm. alt., 5-13 lat., 5-7 mm. cr., supra rotundatis, ubique peritheciis tectis, plerumque sessilibus v. pedicello brevi crassi scuto usque ad 10 mm. longo donatis, nigris, opacis, basi plus v. minus umbrinis v. castaneo-brunneis, ob ostiola peritheciorum subprominentibus rugulosis; crista stromatica longitudinaliter plicato-fissa et marginibus involutis; peritheciis globoso-ovoideis, 500-600 μ . diam.; ascis numerosissimis,

cylindraceis, 100-110 \times 5-6, plerumque octosporis raro tetra- v. hexasporis; paraphysibus numerosissimis, tenuibus, muco vestitis; sporidiis plerumque laxe recte monostichis, nigricantibus, ellipsoideis, utrinque fusoideo-acutatis, plerumque 8 \times 3.

Hab. in ligno putri in silvis primævis, prope Raiz da Serra Sao Paulo Brasiliæ. *Xylaria involuta* Sacc. et *claviformi* Starb. affinis.

3. *Xylaria radicata* P. Henn., Engl. Jahrb. XXXVIII (1905) p. 127. 4479
 Stromatibus simplicibus v. basi fasciculatis longe radicatis, cylindraceo-clavatis vel fusoideis, primo cinereo-pruinosis, dein atris, usque ad 8 cm. longis, 5 mm. cr., parte radiciformi usque ad 65 cm. long., 1 cm. crassis, teretibus; peritheciis immersis, vix ostiolatis (plerumque immaturis); ascis longe cylindraceis, octosporis, oblique monostichis, navicularibus, c. 15 \times 4 immaturis.

Hab. in radicibus putrescentibus Cocoës, Lome Togo Africæ centr. (WARNECKE).

4. *Xylaria strobiliformis* P. Henn., in Voeltzkow Reise Ostafrika III (1908) p. 31, tab. III, fig. 25. — Stromatibus ovoideis, stipitatis, strobiliformibus, atro-carbonaceis, intus gilvis, extus rugulosis, punctoideo-ostiolatis, c. 2 cm. long., 1,5 cm. latis, stipite subsquamoso, ferrugineo, 6-9 mm. longo, c. 3 mm. cr.; peritheciis immersis subglobosis, atris, c. 0,5 mm. diam.; ascis cylindraceis, octosporis, p. spor. circ. 120-130 \times 7-10; sporidiis oblique monostichis, oblonge navicularibus, utrinque obtusiusculis, atris, 16-26 \times 6-9.

Hab. in ligno Fianarantsoa Madagaskar. — *Xyl. polymorphæ* (Pers.) var. *hypoxyleæ* Nits. affinis.

5. *Xylaria pallide-ostiolata* P. Henn., Engl. Jahrb. XXXVIII (1905) 4481 p. 128. — Stromatibus clavatis stipitatis 1-3 cm. long., atro-rufis, clavula subtereti apice obtusa, 4-5 mm. crassa, verrucoso-rugulosa, ostiolis prominulis, zona pallida depressa circumdatis; stipite usque ad 1 cm. longo, 2 mm. crasso, subtereti, ruguloso, atro-fusco, levi; peritheciis immersis, ovoideis, 0,6-0,9 mm. diam.; ascis clavatis apice obtusis, basi stipitatis, 150-170 μ . long., p. spor. 110-130 \times 5-8, octosporis, paraphysibus mycelioideis hyalinis c. 2 μ . crassis; sporidiis oblique monostichis, fusoideo-navicularibus, utrinque obtusis v. subacutiusculis, 15-20 \times 5-7, atris.

Hab. in ligno putri, Victoria Kamerun Africæ (WINKLER).

6. *Xylaria arenicola* Welw. et Curr. — Syll. I, p. 311. — var. *brasilensis* Theiss., Ann. Mycol. VI (1908) p. 344. — Stipite radicato, rhizoide, sordide cinereo, sursum fuligineo, subæquali sul-

cato, longitudine varia, simplici vel pluribus fasciculatis; clava paullo incrassata, lanceolata, atra, sulcata, utrinque subattenuata, simplici vel furcata, apice fertili vel acuminato, griseo-pulveraceo, sterili, saepius appланato-furcato, superficie ob perithecia obtuse v. subconice prominula torulosa, 5-35 \times 1-3 mm.; peritheciis confertis v. interrupte sparsis, areola plus minus distincta glabra et papilla acutiuscula instructis, vix 300 μ . diam.; ascis 65-85 \times 5-7, p. spor. 45-70 μ . longa; sporidiis ellipticis rotundatis, fusco-badiis, 6-10 \times 4-5; paraphysibus filiformibus.

Hab. ad nidos Termi tum locisque arenosis, Sao Leopoldo Brasilia (J. RICK S. J.). — *Xylaria nigripedi*, *X. scotica*, *X. rhizomorphæ* etc. affinis, sed satis distincta.

7. *Xylaria brevipes* Sacc. et Fairm. in Saccardo, Microm. Amer. 4483 novi, Journ. of Myc. XII (1906) p. 47. — Stromatibus solitariis v. rarius binatis, lignicolis, cylindraceis, basi rotundatis paullo crassioribus, sursum sensim tenuatis, brevissime stipitatis, ob ostiola acutiuscula vix prominula asperulis, glabris, opace nigris, intus candidis, totis 2,5 cm. longis, 3 mm. diam.; stipe crassiusculo, cylindraceo, longitrosum sulcato, glabro, nigro, 1-3 mm. long., 1-1,5 mm. cr.; peritheciis immersis, globosis, monostichis, 250-300 μ . diam., nigris; ascis cylindraceis longe sensimque tenuato-stipitatis, parte sporif. 70 \times 5,5-6; sporidiis recte v. oblique monostichis, ellipsoideis, inaequilateris, utrinque obtusatis, 11-12 \times 4-4,5, fuligineis.

Hab. ad truncos dejectos pr. Lyndonville, New York, 1905. — Pertinet ad subgen. *Xyloglossa* Sect. b. Habitu aliquid accedit ad *X. corniformem* et *X. cypressiformem* sed characteribus variis recedit. — Var. *africana* Sacc., Myc. cong. novi, Ann. Myc. IV (1906) p. 75, tab. II, fig. 4. — A typo americano differt ostiolis paullulo minus prominulis, substantia interiore lignicolore nec alba. Totus fungus nigricans, 4,5-5 cm. altus, 3,5-4 cm. cr., stipes 7-8 mm. longus, 1,7-2 mm. cr., sulcatus, glaber; sporidia 9-10 \times 5; ascis breve stipitati, 60 \times 5,5-6, parte sporifera. — Ad caudices, Kisantru, Congo Africæ (J. GILLET).

8. *Xylaria fibula* Massee, Kew Bull. n. 7 (1906) p. 256. — Stroma 4484 tibus sessilibus, pulvinatis, subtus umbilicatis, extus fusco-atris, opacis, minutissime granulatis, intus albo-farctis, suberosis, 1-1,5 cm. latis; peritheciis majusculis, globosis, vix papillato-ostiolatis; ascis cylindraceis apice obtuse rotundatis, basi elongato-pedicellatis, paraphysibus filiformibus obvallatis, octosporis; sporidiis oblique

monostichis, ellipsoideis, inæquilateralibus, 26-30 \times 8-10, primo 2-guttulatis dein opace fuligineis.

Hab. in ligno emortuo Bukit Timak Singapore Asiae orient. (RIDLEY). — *X. tuberiformi* proxima.

9. *Xylaria gigantea* (Zipp. et Lév.) Fr. — Syll. I, p. 324. 4485

Hab. quoque in insula Java (HEINRICHRE). — Clava 10-12 cm. longa, 2-3 cm. crassa, luride fulva vel tabacina, intus pallida, cava; stipite 2-5 cm. longo, 7-10 mm. crasso vel subnullo, peritheciis globosis, nigris, ore vix prominulo; ascis cylindraceis, parte sporifera 150 \times 9 stipite longissimo, filiformi, usque ad 75 μ . vel ultra; sporidiis reniformibus, fuscis, 20-23 \times 7. Species haec meo sensu, tantum forma majuscula *Xylarie tabacina* Kickx (1841) est. Etiam *Xylaria Wrightii* Berk., *X. involuta* Kl., *X. portoricensis* Kl. et *X. Gomphus* Fr. saltem prout ab autoribus intelliguntur hue sunt referendæ. (Bresadola, Ann. Mycol. V (1907) p. 240).

10. *Xylaria involuta* Kl. — Syll. IX, p. 538 — var. *nigrescens* Sacc., 4486

Myc. cong. novi in Ann. Myc. IV (1906) p. 75, tab. II, fig. 6. — A typo dignoscitur clavulis paullo brevioribus et angustioribus, nempe 5 cm. longis, 1-1,2 cm. cr., sèpius magis incurvatis, extus totis æqualiter nigricantibus (nec ochraceo-tabacinis et ob ostiola nigra punctulatis), intus ut in typo, lignicoloribus et compactis; peritheciis globosis immersis, nigris, 1 mm. diam., æque ac in typo.

Hab. ad truncos, Kisantu Congo Africæ (J. GILLET). — Stromata, ut in typo, mox longitudinaliter profunde sulcata et subinde fissa. Ascii cylindrici, breve stipitati, 90-110 \times 7-7,5; sporidia navicularia, inæquilatera, atro-fuliginea, 14-18 \times 5,5. *Xylarie involutæ* synonyma sunt: *X. tabacina* (Kx.) Berk. et *X. Telfairii* (Berk.) Sacc. — Syll. I, p. 320 et 324.

11. *Xylaria obesa* Syd., Ann. Mycol. V (1907) p. 400 cum icon. — 4487

Stromate maximo, difformi, e pluribus partibus quasi confluxis compressis constante, toto (uno tantum viso) 15 cm. alto, 10 cm. lato, basi stipitiformi crasso sterili prædicto, intus lignoso-carnoso pallido; cortice primitus concolori, tandem in parte peritheciata intus atro carbonaceo, extus autem albido ibique plicato-areolato; peritheciis æque distributis, punctiformibus, atris, immersis, apice parum prominulis, carbonaceis; ascis clavatis, apice rotundatis, breviter stipitatis, octosporis, 70-80 \times 8-12; sporidiis oblique monostichis, anguste ellipsoideis, subinde leniter inæquilateris, continuis, ex hyalino atro-fuscis, 12-16 \times 4-6 $\frac{1}{2}$.

Hab. ad lignum, Kibateni in Africa orient. germanica, (A. KARASEK).

12. *Xylaria papillata* Syd., in De Wildem., Flore Bas-et Moy. Congo 4488 t.³ III, fasc. I (1909) Extr. p. 18. — S aromatibus plerumque gregariis, minutis, immaturis conicis, maturis plus minusve globosis 2-4 mm. latis, superficialibus, basi stipitiformi latente instructis, apice præsertim in junioribus minute papillatis, primitus albidis, tandem atris, carbonaceis fragilibus; peritheciis vix prominulis, minutissimis; ascis jam elapsis; sporidiis ellipsoideis subinde naviculiformibus, continuis, fuscis, 15-20 \times 8-10.

Hab. ad cortices, Kisantu, Congo Africæ (VANDERYST).

13. *Xylaria Rickii* Theiss., Ann. Mycol. VI (1908) pag. 342, cum 4489 icon. — Stipite glaberrimo, sulcato, brunneo-fuligineo, tereti vel compresso, 8-30 \times 1-5 mm., intus lignicolore; clava generatim laminato-compressa, rarius cylindrica vel fusiformi, 30-40 \times 2-4 mm., aterrima, laccata, nitentissima, juventute æneo-cærulescente, ostiolis obtusis semiglobosis opacis punctata, longitrosum sulcato-impressa, sursum polymorpha ac varie dilatato-divisa vel plicata, intus lignicolore, strato tamen peripherico albo; peritheciis minutis, globosis, 200-300 μ . diam. immersis; ascis p. spor. 120-140 \times 7-9, breviter pedicellatis; sporidiis rectis vel plano-convexis vel curvulis, rotundatis, pluriguttulatis, opacis, 20-28 \times 6-7; paraphysibus stipatis filiformibus 2 μ . crassis.

Hab. ad trunco in silva, São Leopoldo Brasilia (J. RICK S. J.).

— *Affinis X. zeylanicae.*

14. *Xylaria riograndensis* Theiss., Ann. Mycol. VI (1908) pag. 343, 4490 cum icon. — Minuta, 5-15 mm. longa, 1-2 mm. lata; stipite brevi, rubigineo-pruinoso, basi subdilatata ochraceo-annulata; clavula delicata, testaceo-miniata vel aurantiaca, intus alba, superficie æquali vel peritheciis mammillose prominulis undulata, supra sensim attenuata sterili acuta, juventute apiculo conidiophoro albo-floccoso coronata; peritheciis minutis 200-300 μ . diam., mammillato-prominulis, disco dilutiore melleo cinctis, ostiolo aterrimo hemispherico vel subconico exerto; ascis p. sp. 70-95 \times 6-7, jodo cærulescentibus, pedicello 30-55 μ . longo; sporidiis fusco-badiis; utrinque rotundatis vel vix angustatis, nitide 1-2-guttatis, 11-15 \times 4-5.

Hab. ad ligna, Petropolis, Rio Grande do Sul, Brasilia (J. RICK S. J.). — Differt a *Xyl. venosula* Spieg. clava non reticulato-ri-mosa, peritheciis non omnino immersis et sporidiis.

15. *Xylaria transiens* Theiss., Ann. Mycol. VI (1908) p. 341, cum 4491

icon. — Stromate conidiophoro brevi, flabelliformi, plicato-crispato vel plus minus clavato-arbusculiformi, albo-roseo, dein griseo, a clavula juvenili sensim elevato, postea deciduo; conidiis ovoideis, 6-10 \times 2-4; stromate pyrenophoro: stipite columnæformi indumento crasso æneo-violaceo-pannoso vestito, 2-3 cm. longo, 7-10 mm. cr. in clavam transeunte, clava primitus gilvo-isabellina, dein rubro-aurantiaca vel brunneo-nigrescente, late compresso-ovata vel spathulata, apice rotundato, 12-20 \times 8-16 \times 2-4 mm., intus farcta alba, superficie reticulato-fissa prorumpentibus ostiolis æneo-nigris obtusissimis; peritheciis globosis stipatis 500-700 μ . diam.; ascis p. sp. 90-115 \times 9-11, pedicello 40-70 μ . longo; sporidiis 19-24 \times 9-10, oblongo-ellipticis, rotundatis, brunneo-nigris, grosse 1-2-guttulatis.

Hab. ad lignum emortuum in silva, Petropolis, Rio Grande do Sul Brasilia (J. RICK S. J.).

16. *Xylaria torquescens* Sacc., Myc. cong. novi, Ann. Myc. IV (1906) 4492 p. 74, tab. II, fig. 5. — Parce fasciculata, tereti-clavata, subsessilis, sed deorsum sensim tenuata, tota glabra, 9-10 cm. alta, 1-1,5 cm. cr., sordide cinerea, initio (ut videtur) molliuscula, mox ascendit fortiter flexuoseque contorta et irregulariter plicata, intus excavata, crusta demum valde fragili et secedente, ob ostiola punctiformia crebra seriatim disposita minute lineato-reticulata, interne albicante; peritheciis globosis, immersis, diu molliusculis et pallidis dein nigrificantibus, vix 0,5 mm. diam.; ascis jam resorptis; sporidiis ellipsoideo-navicularibus, utrinque rotundatis, inaequilateris, 11-11,5 \times 5,5, fuligineis.

Hab. ad caudices, Kisantu, Congo, Africa (J. GILLET). — *Xyl. grammicæ* affinis, sed magis fragilis, pallidior, peritheciis mollioribus et imprimis sporidiis minoribus (nec 15-18 μ . longis).

17. *Xylaria sessilis* Ferd. et Winge, Botanisk Tidsskr. XXIX (1908) 4493 pag. 18, tab. II, fig. 7. — Clavulis ellipsoideo-cylindraceis, basi subito constrictis, sessilibus, textura carbonacea intusque denique cavis, 3-4 mm. long., 2 mm. cr., rugosis, fuscis; peritheciis globosis circ. $\frac{1}{2}$ mm. diam., ostiolis papilliformibus, minutissimis, sub lente etiam ægre conspicuis, prominentibus; ascis cylindraceis, juvenilibus apice usque ad 7 μ . incrassatis, truncatis, poro jodi ope cærulescente, in stipitem longissimum leniter attenuatis, paraphysatis, maturis evanescentibus, parte sp. 80-100 \times 6-7; sporidiis monostichis, e dorso ellipsoideis v. oblongo-ellipsoideis, non-

numquam ovatis, e latere inæquilaterali-subnavicularibus, saepeque curvulis, 11-15 µ. c. long. 5-6 µ. cr., 2-guttulatis, fuscis.

Hab. ad ramulum corticatum in insula St. Thomas Indiae occ.
(RAUNKIAER).

18. *Xylaria reducta* Syd., Ann. Myc. V (1907) p. 339. — Stroma 4494
tibus solitariis v. subinde paucis aggregatis, erectis, rectis v. sae-
pius leniter curvulis, teretibus, apice obtusis, deorsum vix v. pa-
rum attenuatis, stipite nullo v. subnullo, totis 1-2 cm. altis, $\frac{1}{2}$ - $\frac{4}{5}$
cm. latis, obscure atro-brunneis, peritheciis immersis, minutissimis
punctiformibus, atris; ascis cylindraceis v. subfiliformibus, apice
obtusis, pedicellatis, 65-75 5-6, octosporis; sporidiis monostichis,
ellipsoideis, utrinque acutiusculis, continuis, fuscis, opacis, 6-8 3-4.

Hab. ad lignum, Kiemoni in Africa orient. germanica (A. KA-
RASEK).

19. *Xylaria rugosa* Sacc., Myc. cong. novi, Ann. Mycol. IV (1906) 4495
pag. 74, tab. II, fig. 2. — Fasciculata, suberoso-lignosa, breviter
stipitata, casse clavata, tota 3-4 cm. alta, 1-1,5 cm. crassa, fuligine-
nea (nec nigra) in sicco eximie plicato-rugosa sed, ob ostiola la-
tentia superficie levigata, intus lignicolore compactiuscula; peri-
theiciis globosis, 0,5-0,7 mm. diam., immersis; ascis cylindraceis,
p. sporif. 110-120 9-10; sporidiis navicularibus, inæquilateris, u-
trinque obtusulis, e latere compressis, 22-25 8-9, atro-fuligineis.

Hab. ad trunco, Kimnenga Congo, Africa (J. GILLET). — Af-
finis *X. holophaea*, sed stromata valde rugosa, saepius fasciculata,
breviora, obtusa; forte affinis *Xyl. curtæ* sed sporidiis longioribus
recedit.

20. *Xylaria ophiopoda* Sacc., Myc. cong. novi, in Ann. Myc. IV (1906) 4496
p. 74, tab. II, fig. 1. — Solitaria, longissime stipitata, tota gla-
bra, 18-20 cm. alta, suberoso-lignosa; clava tereti-oblonga, inæ-
quali, apice obtusa, nigra, 12-14 mm. cr., superficie valde rugosa
sed ostiolis vix punctulata, intus compacta lignicolore; stipite cy-
lindraceo, valde tortuoso, rugoso-sulcato, fusco-nigricanti, 14-15
cm. longo, 4 mm. cr.; peritheciis globosis, immersis, 0,7 mm.
diam., totam clavam occupantibus et nonnullis in partem sup.
stipitis descendentibus; ascis cylindricis, p. sporif. 160-170 11-12;
sporidiis navicularibus, inæquilateris, utrinque obtusulis, 25 9-10,
atro-fuligineis.

Hab. ad caudices, Kisantu, Africæ (J. GILLET). — Præcipue
stipite prælongo a formis *X. polymorphæ* dignoscitur.

21. *Xylaria lignosa* Ferd. et Winge, Botanisk Tidsskr. XXIX (1908) 4497

p. 18, tab. II, fig. 6. — Stromate grosse clavato, compresso, subcurvato, leviter torto, solido, lignoso, apice obtuso, postice in stipitem crassum, brevissimum, glabrum, clavæ concolorē sensim attenuato, extus ruguloso, fusco, ex ostiolis peritheciōrum nigropapillato, intus ex argillaceo fumoso, long. usque ad 11 cm., cr. 4 \times 2 cm.; peritheciis dense stipatis, late ellipsoideis, $\frac{3}{4}$ -1 mm. \times $\frac{1}{2}$ - $\frac{3}{4}$ mm.; ostiolis papilliformibus, nigris, subnitentibus, poro minuto pertusis; ascis plurimis jam resorptis, paucis evanescentibus visis, poro jodi ope cærulescente; sporidiis e dorso elongato-ellipsoideis, e latere navicularibus, utrinque rotundatis, guttulatis, 14-18 \times 6-7,5, maturis atris.

Hab. ad trunco in insula St. Croix Indiæ occid. (RAUNKIAER).

22. *Xylaria elegans* Syd., Ann. Mycol. V (1907) p. 357, cum icon. — 4498
Stromatibus solitariis, totis 1,5-3 cm. longis, clavula oblongo-conica, 1-1,5 cm. longa, 3-5 mm. crassa, apice acuta, basi haud in stipitem attenuata, crusta dealbata omnino tecta, intus pallida lignosa; stipite cylindrico, $\frac{3}{4}$ -1 $\frac{1}{2}$ cm. longo, 1-1 $\frac{1}{2}$ mm. crasso, atro, glabro, longitudinaliter sulcato; peritheciis immersis, atris, punctiformibus, minutis; ascis cylindraceis, breviter stipitatis, 110-150 \times 12-16, octosporis; sporidiis monostichis, cymbiformibus, continuis, fuscis, plerumque 2-guttulatis, 30-42 \times 10-14.

Hab. ad truncum putridum, Prov. Sao Paulo, Sao Francisco dos Campos, Brasilia.

23. *Xylaria appendiculata* Ferd. et Winge, Botanisk Tidsskr. XXIX (1908) p. 17, tab. II, fig. 5. — *Stromatibus nunc hypoxyloideis, subglobosis, nunc clavatis, stipitatis; clavulis rugosis, ostiolis peritheciōrum exasperatis, long. usque ad 3 mm., 1 mm. fere cr., fusco-nigris, intus niveis, deorsum in stipitem primo albo-farinum, mox nudum, longitudinaliter striatum, clavulæ fere colore et longitudine leniter attenuatis; peritheciis remotis, globosis, 200 μ . circ. diam., ostiolis semiglobosis v. subconicis, magnis, prominentibus; ascis cylindraceis, apice rotundatis, poro jodi ope intense cærulescente, in stipitem leniter attenuatis, 105-115 (parte sp. 80-87) \times 7,5-8 $\frac{3}{4}$; sporidiis monostichis, octonis rarissime quaternis, 14 μ . long., coffeiformibus, 11-12,5 \times 6,5-7, 2-guttulatis, fuscis, muco tenui indutis, utrinque appendicula obtuse conica, hyalina, 2-3 μ . long. instructis; paraphysibus filiformibus, septatis.*

Hab. ad folia sicca Crescentiæ cucurbitinæ (?), in insula St. Croix Indiæ occ. (RAUNKIAER).

24. *Xylaria albo-punctulata* Rehm, in Kellerman Journ. of Mycol. 4500

XIV (1908) p. 5. — Stromatibus erectis, oblongo-claviformibus, utrinque plus minusve compressis, apice rotundatis, in stipitem c. 0,5 cm. long. et 0,8 cm. lat. abeuntibus, glabris, carbonaceis, 5-6 cm. long., 1,5 cm. latis, extus fuscis, longitudinaliter substrigatis, versus stipitem nigrescentibus, intus solidis, nigris, peritheciis plane immersis, globosis, 1 mm. diam., ostiolis minimis, nigris, extus strias perspicue punctulatas in areolis orbicularibus albidis, 0,3-1 mm. latis formantibus; ascis cylindraceis longissimis, 7 µ. lat., 8-sporis; sporidiis fusiformibus, plerumque navicularibus, fuscis, 1-cellularibus, 15 × 6, monostichis; paraphysibus filiformibus.

Hab. ad trunco, Los Amates Dep. Izabal Guatemaæ (KELERMAN). — *Xylarie gramineæ* Mart. proxima, differt striis stromaticis distinctis confluentibusque, peritheciis minoribus atque defectu areolarum albidastrum.

25. *Xylaria Laurentii* P. Henn., Etat indép. du Congo, Mission E. 4501 Laurent. fasc. IV (1907) p. 362. — Stipite elongato-radicato, rugoso, stromatibus cæspitosis, rugoso-flexuosis, tuberculatis, atrofuscis, p. p. subnitentibus; peritheciis immersis minute ostiolatis, subglobosis intus albidis; ascis filiformibus, paraphysatis, octosporis, c. 4 µ. cr.; sporidiis longe fusoideis, utrinque acutis, atro-brunneis, 17-22 × 3-4.

Hab. ad trunco emortuos, Dibele Congo Africæ centr.

II. *Xylocoryne*.

26. *Xylaria Hercules* Speg., An. Mus. Nac. Buenos Aires t. XIX 4502 (1909) p. 347. — Solitaria v. laxe cæspitosa; clavis cylindraceis v. linguæformibus, intus farctis albo-suberosis, 5-10 cm. long., 3-5 cm. lat., 1-1,5 cm. cr., stipite abbreviato v. elongato subvelutino suffultis; peritheciis dense constipatis, e globoso subpiriformibus non prominulis 0,75-1 mm. alt., 0,6-0,7 mm. diam., coriacellis, atris; ascis cylindraceis longe pedicellatis, parte sp. 75-100 × 7-12, pedicello subæquilongo suffultis, non v. parce paraphysatis, octosporis; sporidiis rectis v. oblique monostichis, navicularibus, 16-20 × 6-9, opace fuligineis.

- Hab.* frequens ad caudices putridos cariosos in silvis circa Formosa nec non in Bobadal, Rep. Argentina Amer. austr.
27. *Xylaria sordida* Spegazz., An. Mus. Nac. Buenos Aires t. XIX 4503 (1909) pag. 348. — Cæspitosa; clavulis elliptico-lanceolatis valde

compressis 1-2 cm. long., 5-10 mm. lat., 2-3 mm. cr., utrinque attenuatis, deorsum in pedicellum breviorem pannosulum sensim attenuatis, extus sordide fuscis dense minuteque colliculoso-scrupulosis intus albo-ligneis; peritheciis dense constipatis subglobosis 0,5-0,6 mm. diam. plus minusve prominulis, fuscis, coriacellis, vix ostiolato-papillatis; ascis cylindraceis prælonge pedicellatis aparaphysatis, 120 \times 6; sporidiis ellipsoideo-navicularibus subopace fuligineis, 9-10 \times 4-6, non v. 1-2-guttulatis.

Hab. ad schidia lignea putrescentia prope Cordoba et Tucuman nec non in silva Bobadal, Rep. Argentina Amer. austr.

28. *Xylaria corniformis* Fr. — Syll. I, p. 327 — var. *macrospora* 4504 Bres. in Theiss., Ann. Myc. VI (1908) p. 342. — Versiformis; typice compresso-spathulata, imo flabellata, rarius plus minus regulariter clavata, formis compressis ludens; stipite curto firme, indumento subcylindrici purpureo-violaceo crasso, saepius pluribus stipitibus uno subiculo crassissimo junctis; clava primo fusco-argillacea dein brunnea, scrupulosa, superficie areolata, apice undulato vel simplici obtusulo vel conico haud acuto; peritheciis ova-to-angulatis, immersis, minutis, stipatis, 200-400 μ . diam., ostiolo delicato semigloboso prominulo; ascis p. sp. 80-100 \times 6-8, pedicello 30-80 μ . longo; sporidiis rectis v. reniformibus, opacis, utrinque rotundatis, grosse 2-guttulatis, saepius in asco agglomeratis 15-19 \times 5 $\frac{1}{2}$ -6 $\frac{1}{2}$.

Hab. ad trunco in silva, Sao Leopoldo Brasiliæ. — Stipes 2-20 \times 2-7 mm. varians; clava 15-30 mm. alta, 3-25 mm. lata, 2-4 mm. cr.

29. *Xylaria macropoda* Speg., An. Mus. Nac. Buenos Aires t. XIX 4505 (1909) p. 347. — Cæspitosa, erecta 20-25 cm. alta, sordide atro-fusca e carbonaceo suberosa; clavulis subcylindraceis 5-10 cm. long., 1-1,5 cm. diam. colliculosis levibus, fusco-farctis, ubique fertilibus, stipite prælongo suffultis 10-15 cm. long., 5-7 mm. cr.; peritheciis subglobosis immersis, subcarbonaceis 0,8-1 mm. diam. non v. vix papillato-ostiolatis; ascis cylindraceis longe pedicellatis subaparaphysatis, parte sporif. 60-75 \times 6, ped. 40-75 μ . longo; sporidiis anguste navicularibus fuligineis recte monostichis, 10-14 \times 5.

Hab. ad palos humifusos subputrescentes in aridis prope Tucuman Rep. Argentina, Amer. austr. — *Xyl. longipedii* Nits. affinis sed certe distincta.

III. *Xylostyla.*

30. ***Xylaria fasciculata* Speg.** — Syll. I, p. 340. — f. *leptasca* Speg., 4506
 An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 346. — A typo
 recedit ascis aparaphysatis nec non gracilioribus.
Hab. ad trunco carioso Citri Aurantii prope Bella Vista,
 Argentina Amer. austr. (J. M. HUERGO).
31. ***Xylaria lima* v. Höhnel,** Ergeb. Bot. Exp. Südbras. 1901, Denk. 4507
 k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 27, tab. I,
 fig. 6. — Stromatibus simplicibus, opace nigris, glabris; stipite
 cylindraceo circ. 5 mm. long., 0,5 mm. cr., basi vix incrassato et
 clavam 7 mm. longam, 1 mm. latam, cylindraceam utrinque atte-
 nuatam summo apice sterilem sed lateraliter ubique ob ostiola sur-
 sum versa fortiter prominentia dentatam v. serrulatam ferente;
 contextu stromatico albo suberoso; peritheciis crebris circ. 260 μ .
 diam., conideo prominentibus, ostiolo rotundato circ. 30 μ . lato;
 paraphysibus mucosis; ascis cylindraceis, octosporis, circ. 90 \times 7-8;
 sporidiis monostichis, subpellucidis violaceo-nigris, ellipsoideo-sub-
 reniformibus, unilocularibus, utrinque angustatis, 12-13 \times 6.
Hab. ad terram humosam, Raiz da Serra prope Santos, São
 Paulo, Brasilia.
32. ***Xylaria Phyllocharis* Mont.** — Syll. I, pag. 342 — var. *hirtella* 4508
 Theiss., Ann. Mycol. VI (1908) pag. 343. — Stipite 1-2 $\frac{1}{2}$ cm.
 longo, badio-nigro, subtorto, striato, delicato, fusco-hirtello, aestate
 solum glabrato; clava 6-8 mm. longa, 600-800 μ . crassa, atra, to-
 rulosa, breviter apiculata; peritheciis semiliberalis, globosis vel sub-
 conicis, ostiolo exerto hemisphaerico v. conico; ascis p. sp. 65-
 90 \times 7-9, pedicello firmo 20-55 μ . longo; sporidiis obscure brune-
 nies, grosse guttatis, obtusis, gibbosis, delicate hyalino-tunicatis,
 haud appendiculatis.
Hab. in foliis siccis Rubiaceæ cujusdam, in silva, São Leo-
 poldo Brasiliæ. — Differt a typo præcipue stipite hirtello, spori-
 diis largioribus peritheciisque semiliberalis et clava non griseo-
 leprosa. A *Xyl. phyllophila* Ces. et *Xyl. delicatula* Starb. quibus
 affinis, satis diversa.
33. ***Xylaria venustula* Sacc.** Myc. cong. novi, Ann. Myc. IV (1906) 4509
 p. 76, tab. II, fig. 10. — Cæspitosa, stipitata, exilis, tota nigra
 et glabra, 3-3,5 cm. alta; stipite simplici v. rarius furcato, angu-
 ste cylindrico, sicco compresso et torto, 1,5 cm. longo, vix 1 mm.

cr.; clavula cylindrica, leviter torulosa, 1,5 cm. longa, 1,5-1,7 mm. cr., extus ostiolis minutissimis punctulato-asperula, apice mucrone tereti-conico, 3-5 mm. longo, vix 1 mm. cr., sterili terminata; medulla stromatis interiore angustissima albida; peritheciis globosis, vix 0,5 mm. diam.; ascis cylindraceis, p. sporif. 90-100 \approx 7-8; sporidiis oblongo-ovoideis, leviter inæquilateris, utrinque rotundatis, atro-fuligineis, 12-14 \approx 5-5,3.

Hab. ad trunco, Kisantu, Africa (J. GILLET). — *Affinis Xyl. cæspitulosa* sed stipes simplex v. rarius tantum e basi furcatus et sporidia latiora; *Xylaria apiculata* sed sporidia multo breviora; *Xylaria gracili* et *scopiformi* sed clavula manifestissime mucronata.

34. *Xylaria variegata* Syd., Ann. Mycol. V (1907) p. 358. — Stro- 4510 matibus solitariis, erectis, filiformibus, in ligno denigrato insertis simplicibus, raro etiam bifurcatis, totis 3-6 cm. longis, usque ad 2 mm. latis, sordide ochraceis, apice brevi acuto sterili, basi sterili, non incrassato, glabro; peritheciis sphærico-mammiformibus, papillulatis, atris, sparsis vel aggregatis, 300-500 μ . diam.; ascis filiformi-cylindraceis, p. sp. 35-55 \approx 3-4, longe stipitatis, octosporis; sporidiis oblique monostichis, ellipsoideis, saepe leniter inæquilateris, continuis, fuscis, primo 2-guttulatis, 7-9 \approx 2 $\frac{1}{2}$ -3.

Hab. in ligno, Campinas, São Paulo, Brasilia.

35. *Xylaria gracilenta* Syd., Ann. Mycol. VIII (1910) p. 38. — Stro- 4511 matibus ut videtur solitariis, erectis, atris, simplicibus, raro bifidis, 2-5 cm. altis, subfiliformibus, apice sterili elongato subulato 0,5-1,5 cm. longo; stipite subtereti vel compresso, glabro, filiformi, c. 1-3 cm. longo, $\frac{1}{2}$ - $\frac{3}{4}$ mm. crasso; peritheciis in stromatum parte media crassiore, usque 2 mm. crassa et 2 cm. longa, plus minus copiose sitis, subliberis, subglobosis, prominulis, majusculis, c. 1 mm. latis, distincte papillatis; ascis cylindraceis, apice obtusis, longe stipitatis, p. spor. 140-165 \approx 14-18, octosporis, stipite usque ad 100 μ . longo; sporidiis monostichis, ellipsoideis, utrinque acutiusculis, continuis, fuscis, 21-32 \approx 10-13.

Hab. ad frustula lignea Pauai, Benguet, prov. Luzon, insulæ Philippinenses (E. D. MERRILL).

36. *Xylaria Termitum* Jumelle et Perrier de la Bathie in Rev. génér. de Bot. (1910) pag. 55-60, fig. 5-9. — Stromatibus conidiophoris simplicibus v. ramosis, in nidis *Termitum* parte radicali pralonga immersis; clavis cinereis cylindraceis, apice abrupte conicis, 2-6 mm. cr.; conidiophoris 30-60 \approx 5-9 apice globoso-inflatis; conidiis immersis, in vesicula capitatis, globulosis, 3 μ . diam.; stromatibus

ascophoris e parte radicali immersa prælonga tortuosa ramosa o-riundis, totis glabris, indivisis; stipitibus cylindricis $1\frac{1}{2}$ -2 cm. long., nigris; clava cylindraceo-clavata, albida, punctis nigris (ostio-lis) notata; peritheciis immersis ovoideis 600-800 \approx 340-500; ascis breviter paraphysatis; sporidiis ovoideis, nigricantibus, 6 \approx 3, uno apice obtusioribus.

Hab. in nidis *Termitis Perrieri*, Madagascar. — Diagnosis imperfecta. Species testibus auctoribus distinguitur conidiis in vesicula capitatis. Quoad biologiam cfr. Auct. l. c.

IV. *Xylocladyla*.

37. *Xylaria aristata* Mont. — Syll. I, p. 333. — var. *hirsuta* Theiss., 4518 Ann. Mycol. VI (1908) pag. 344. — Stromate filiformi atro-glaucemente, basi vix incrassato, pilis atro-fuscis hirto, 10-22 \times 0,3-0,5 mm., sulkato; capitulo globoso v. breviter elliptico, primo dealbato, dein griseo-atro 1-2 mm. diam., subtus non striato, peritheciis globosis tuberculato, apice mucrone brevi acuto conico co-ronato v. stromate filiformi tenuissimo longe superato, vel capitulo emnino obtuso; peritheciis pro ratione magnis, 600 μ . diam., protuberantibus, ostiolo nigro papillato in areola generatim cine-rescente insignitis; ascis p. sp. 90-120 \approx 8-10, pedicello 35-70 μ . longo; sporidiis rectis vel plano-convexis, utrinque angustatis, 14-20 \times 7-9.

Hab. in foliis siccis Rubiaceæ cujusdam in silva, Sao Leopoldo Brasiliæ. — Differt a typo peritheciis subliberis sporidiisque majoribus. Ostioli exsertis a *Xyl. marasmoides* B. et C. et *X. axi-fera* Mont., sporidiis majoribus a *X. oocephala* Pat. et *Xyl. deli-catula* Starb. diversa.

38. *Xylaria mauritiensis* P. Henn., in Voeltzkow Reise Ostafrika III 4514 (1908) p. 30, tab. III, fig. 24. — Stromatibus subcæspitosis, fili-formibus, erectis, simplicibus v. ramosis, atris, 4-5 cm. long., c. 1 mm. cr., apice subulatis, basi strigosis; peritheciis subliberis spi-culiformibus, globosis, atris, minute ostiolatis, 0,5-0,7 mm. diam.; ascis cylindraceis, stipitatis, c. 100 μ . long., p. spor. 50-60 \approx 4-5, octosporis, paraphysatis; sporidiis oblique monostichis, inæquilate-raliter fusoideis, utrinque subacutiusculis, 8-12 \times 3,5-4,5, atris.

Hab. in ligno, Mauritius Africa. — *X. trichopodæ* Penz. et Sacc. affinis sed differt ascis sporidiisque minoribus.

39. *Xylaria emilacicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 4515

(1909) p. 348, cum icon. — *Solitaria v. laxissime gregaria parva* insititia; clavulis inflato-torulosis, atris, sæpe apiculatis, stipite graciili brevi suffultis, carbonaceis, 1,5-3 mm. long., 1-1,5 mm. cr.; peritheciis dense constipatis, sat prominulis, 5-24 in quaque clavula, globulosis 0,4-0,5 μ . diam., carbonaceis, minute papillato-ostiolatis; ascis paraphysatis, longiuscule pedicellatis, cylindraceis v. subclavulatis, p. sp. 80-120 \approx 8-12, ped. 60-80 μ . long., octosporis; sporidiis ellipsoideo-navigularibus, 14-18 \approx 6-8, opace fuligineis, non v. grosse 1-2-guttulatis.

Hab. ad sarmenta arida putrescentia in Parque Roca, prope Tucuman, Argentina, Amer. austr.

40. *Xylaria Copelandi* P. Henn., Hedwigia XLVII (1908) p. 260. — 4516
Stromatibus dense cæspitosis, ovoideis, breve stipitatis, rugulosis, pruinosis v. cinereo-pilosulis, atris, apice longe rostratis, c. 1 mm. diam., sæpe longitudinaliter sulcatis, paucilocularibus; ascis cylindraceo-clavatis, pedicellatis, p. spor. 80-90 μ . l., 8-sporis, paraphysatis; sporidiis oblique monostichis navigularibus, obtusiusculis, atris, 15-16 \approx 6-7.

Hab. in truncis Calami sp., Luzon, Prov. Bataan, Lamao River, Ins. Philippin. (COPELAND).

41. *Xylaria bataanensis* P. Henn., Hedwigia XLVII (1908) p. 260. 4517
— *Stromatibus* cylindraceo-fusiformibus, stipitatis, cæspitosis vel irregularibus, clavula usque ad 2,5 cm. longa, 1,5-3 mm. crassa, apiculata v. rostrata, striatula, ostiolis prominulis; stipite tereti, æquali, usque ad 1 cm. longo, 0,5-1 mm. lato; ascis pedicellatis, 80-100 \approx 5-6,5, 8-sporis, paraphysatis; sporidiis oblique monostichis navigularibus, atris, obtusis, 10-14 \approx 4-5,5.

Hab. in ligno putrido, 'Luzon, Prov. Bataan, Lamao River Ins. Philippin. (MERRILL, COPELAND).

42. *Xylaria Fioriana* Sacc., in Ann. Mycol. VIII (1910) p. 337. — 4518
Laxe gregaria v. *sparsa*, pârvula, solitaria, rarius individuis 2-3 basi connexis, tereti-cuspidata, tota castaneo-nigra, apice acuta sterili, 10-15 mm. alta, 1,5 mm. cr., stipite deorsum leniter sensim incrassato, nigro-hirtello, dein glabrato, 2-6 mm. longo; parte peritheciigera 4-6 mm. longa, initio nigro-hirtella; peritheciis minutis globoso-conicis, 200 μ . diam., prominentibus, basi insculptis; ascis sporidiis (propriis, ut videtur), oblongo-ellipsoideis, fuligineis, 11 \approx 4.

Hab. in trunco putri Euphorbiæ abyssinicae sec. torrentem Messeb, alt. 1300 m. Mensa (ADR. FIORI) et prope Filfit Ery

thrææ (L. SENNI). — Ab affini *X. riograndensi* Theiss. differt, stipe deorsum evidenter incrassato, atro-brunneo-hirtello, peritheciis prominentibus (numquam immersis), statura majori etc. Conidia non visa. Clavulæ indivisæ, rarissime furcatæ, sursum sæpius arcuatæ.

43. ***Xylaria corniculata*** Sacc., Myc. cong. novi, Ann. Myc. v. IV 4519 (1906) p. 75, tab. II, fig. 9. — Fasciculata, versiformis, tota nigricans, coriacea, intus compacta albida, 2-4 cm. alta; stipe cylindraceo, e velutino glabratu, 1-2 cm. longo, 2,5-3 mm. cr., in clavulas seu ramos 2-4 modo cylindraceos, modo dilatato-compressos abeunte; clavulis rugosis et asperulis, apieibus acutis corniculatis sterilibus; peritheciis immersis, globosis, nigris, vix 0,5 mm. diam., ostiolis latentibus; ascis cylindraceis p. sporif. 110-130 \times 8-9; sporidiis ovoideo-oblongis, utrinque rotundatis, leviter inæquilateris, 18-20 = 9-10, atro-fuligineis.

Hab. ad trunco, Kisantu, Congo Africæ (J. GILLET). — Affinis videtur *X. digitata* sed satis dignoscitur clavulis sæpe dilatato-compressis, superne bicorniculatis, stipe velutino etc.

44. ***Xylaria capillacea*** Sacc., Myc. cong. novi, Ann. Myc. IV (1906) 4520 p. 76, tab. II, fig. 11. — Dense cæspitoso-fasciculata, tota 6 cm. alta; stromatibus conidiophoris usque ad medium indivisis, cylindraceo-filiformibus, nigris, pilis patentibus crebris hirsutis, sursum in ramulos filiformi-capillaceos, tortuosos, glabros, pallidiores, conidiophoros partitis; conidiis oblongo-ellipsoideis, hyalinis, 5-6 \times 2,5; stromatibus ascophoris intermixtis (an semper a conidiophoris separatis ?), brevioribus; stipe hirsuto 10-15 mm. longo, 0,5-1 mm. cr., clavula simplici, cylindracea, torulosa, 4-5 mm. longa, 1,5 mm. cr., ostiolis minute papillatis asperula, nigricanti, glabra, mucrone brevi acuto terminata; ascis cylindraceis breve stipitatis p. sporif. 60-70 \times 4-5; sporidiis ovoideo-oblongis, utrinque obtusulis, leviter inæquilateris, 9,5-11 \times 4, atro-fuligineis.

Hab. in fructibus putrescentibus dejectis Cassiæ (Cathartocarpi) fistulæ vel affinis, Kisantu, Congo Afric. (J. GILLET). — Affinis videtur *X. janthino-velutina*, sed ramulis capillaceis, stromatibus fertilibus a sterilibus, ut videtur, separatis dignoscitur.

45. ***Xylaria brachiata*** Sacc. Myc. cong. novi, Ann. Myc. v. IV (1906) 4521 p. 75, tab. II, fig. 8. — Longe stipitata, solitaria; stipe anguste cylindrico, 6 cm. alto, 1-1,5 mm. cr., nigricante, hirtello, sæpe e medio arrecto-furcato; ramo altero sterili, altero clavuligero; clavula fusoidea summo apice acuta et sterili, 10-12 mm. longa,

2-3 mm. cr., nigricanti, vix minute rimuloso-rugosula, intus alba et partim cava; ostiolis latentibus; peritheciis crebris, globosis, immersis, nigris, vix 0,5 mm, diam.; ascis cylindraceis, p. sporif. 85 100 \approx 8-9; sporidiis oblongo-ovoideis, leviter inæquilateris, utrinque obtusis, atro-fuligineis, 12-14 \approx 5-5,5.

Hab. ad truncos, Kisantu, Congo Africæ (J. GILLET). — Stipe longo e medio furcato, clava minuta sublevigata satis distinguuntur species.

Fam. 5. Valsaceæ

Sect. 1. Allantosporæ.

CALOSPHÆRIA Tul. — Syll. I p. 95, IX p. 477, XI p. 272; XIV p. 479, XVI p. 419, XVII p. 561.

1. **Calosphæria benedicta** Rehm in Strasser, Verh. k. k. zool.-bot. Gesellsch. Wien LVII (1907) p. 322. — Peritheciis gregariis sub cortice extus pallide griseo-maculato intus immutato nidulantibus, 10-12 valsiformibus, globosis, 300-400 μ . diam., supra collc filiformi usque ad 600 μ . longo, apice obtuso ruguloso usque ad 100 μ . cr. erumpentibus; ascis fusoideis, sessilibus, 40 \approx 10, octosporis; sporidiis cylindraceis, curvulis, unilocularibus, hyalinis, 12-15 \approx 3, tristichis; paraphysibus tenuissimis, septatis, usque ad 3 μ . cr.
Hab. in cortice sicco Piri Mali, Sonntagberg Austriae inf. (STRASSER). — A *C. Aceris* sporidiis majoribus differt.
2. **Calosphæria pleurostoma** Chenant. in Bull. Soc. Sc. Nat. Ouest France (1910) p. 16, t. IV, f. 1. — Peritheciis immersis v. saepius liberis, inordinate aggregatis v. circinantibus, pseudostromate carbonaceo-spongioso connexis, nigris v. brunneis, e levigato verruculosis, ostiolis conicis v. cylindraceis, horizontaliter protractis et matrici adhaerentibus, subinde flexuosis, peritheciis diametrum æquanticibus v. longioribus; ascis clavatis, apice rotundatis, deorsum sensim tenuatis, subsessilibus, paraphysibus asco duplo longioribus, crassis, articulatis, articulis 2-guttatis; sporidiis distichis, allantoideis, hyalinis, 6-7 \approx 1,5-1,7.

Hab. in ramis Piri Mali, Bagatelle pr. Morlaix Galliæ. — Ad *Wegelinam* nutat.

- EROSTELLA** (Sacc.) Trav. Fl. Ital. Crypt. Fungi, Pyren. fasc. I (1906) p. 155, *Calosphaeria* subgen. *Erostella* Sacc. — Syll. I, pag. 101 (1882) *Togninia* Berl., Icon fung. III, p. 9 (1900).
1. *Erostella minima* (Tul.) Trav., loc. cit. (1906) p. 156. — Ita vocanda *Calosphaeria minima* Tul., *Togninia minima* Berl.
 2. *Erostella Rhododendri* (Rehm) Sacc. et Trott., *Togninia Rhododendri* Rehm, Ann. Mycol. V (1907) p. 536. — Peritheciis 4-6 in acervulos orbiculares collectis, cortice interiore pustulatum inflato, haud mutato tectis, denique epidermide ostiolis minimis valsiformiter perforata conspicuis, monostichis, circinantibus, globulosis, ca. 0,3 mm. diam.; ascis clavatis, tenerrimis, usque ad 60 × 5, octosporis; sporidiis oblongis, 1-cellularibus, rectis, hyalinis, 8 × 2, distichis; paraphysibus nullis.

Hab. in ramulis *Rhododendri hirsuti* ad viam inter Schlehdorf et montem Herzogenstand alpium Bavariæ (Dr. REHM).

3. *Erostella transversa* Sacc. et Fairm. in Saccardo, Microm. Amer. novi, Journ. of Myc. v. XII (1906) pag. 48. — Peritheciis inter liberum et periderma evolutis et rima transversali crassiusculæ marginata circ. 2 mm. longa erumpentibus sed non emergentibus, in quoque acervulo 4-6, globulosis, 500-750 μ. diam., peridermate secedente subliberis et sœpe collapso-concavis, glabris, nigris, collis brevissimis, ostiolis obtusis; ascis clavatis, subsessilibus sed deorsum tenuatis, apice rotundatis, 44-48 × 5,5-6, octosporis; paraphysibus filiformibus, asco multo longioribus, minute guttulosis; sporidiis distichis allantoideis, leviter curvis, 8-9 × 2,5, perfecte hyalinis.

Hab. in cortice *Betula* sp. in silvis pr. Lyndonville, Sept. 1905. — Ab *Erostella vasculosa* Sacc. et *E. ambigua* (Berl.) Sacc. differt sporidiis brevioribus, angustioribus, peritheciis rimose transverseque erumpentibus, etc.

QUATERNARIA Tul. — Syll. I p. 106, IX p. 449, XVI p. 422.

1. *Quaternaria chilensis* Speg., Fungi Chilenses (1910) p. 28, cum icon. — Stromatibus subhemisphæricis innato-erumpentibus extus carbonaceis intus pulchre viridibus; peritheciis 3-4-circinantibus mediocribus brevissime ruguloseque ostiolatis, globosis, 200 μ. diam.; ascis clavulatis octosporis, a paraphysatis, parte sporifera 40 × 5; sporidiis cylindraceis, curvulis, 8-12 × 2-2,25, subchlorinis.

Hab. in ramos emortuos Lithrææ causticæ, Parque de Lota Chile Amer. austr.

VALSA Fr. — Syll. I p. 108, IX p. 449, XI p. 273, XIV p. 481, XVI p. 422, XVII p. 562.

1. **Valsa rhodospora** Sacc., Not. Myc. VII, Ann. Myc. IV (1906) 4528

p. 275. — *Acervulis* cortice nidulantibus creberrimis et plerumque confluentibus, irregulariter circinantibus; peritheciis globulosis, nigricantibus, saepe et varie collabescientibus, 300-400 μ . diam.; collis brevibus; ostiolis vix erumpentibus et discum minutum nigrum saepe obsoletum formantibus; contextu celluloso, firmulo, fuligineo; ascis fusiformibus, sessilibus, 42-50 \times 9-11, aparaphysatis, octosporis; sporidiis distichis, allantoideis, utrinque rotundatis, ex hyalino dilutissime roseis, 17-18 \times 3, facile eructatis et in massulas irregulares roseas superficiales coalescentibus.

Hab. in corticibus atratis ramorum majorum *Aceris* sp., Lyndonville New York Amer. bor. (C. E. FAIRMAN). — Species sporidiis exsiliensibus roseis mox dignoscenda. Est affinis *V. ambienti*, a qua praeterea recedit acervulis creberrimis, ostiolis minus conspicuis et peritheciis contextu firmiore, et ex cellulis, ut videtur, minus sinuosus formato.

2. **Valsa amphibola** Sacc., Ann. Mycol. VI (1908) pag. 560. — 4529

Stromatibus gregariis, pulvinato-verruciformibus, cortice nidulantibus mox erumpentibus et prominentibus, 1-1,4 mm. diam., disco subcirculari, applanato, albido, ostiolis globulosis, nigris, saepius periphericis punctato; peritheciis globulosis, monostichis, nigris 300 μ . diam.; collis cylindricis longiusculis; ascis late clavatis, subsessilibus, basi acutatis, apice rotundatis, 45-55 \times 8, aparaphysatis, octosporis; sporidiis distichis v. partim oblique monostichis, allantoideis, 12-14 \times 2,5, hyalinis, curvulis.

Hab. in ramis radicalibus epigaeis Piri Maii, Tamsel Germaniae (P. VOGEL). — Stromatis substantia interior a corticali vix distinguenda et nulla linea nigra stromatica circumscripta; hinc species ob discum ad subgen. *Leucostomam* vergit, ob defectum vero lineæ stromaticæ ad *Euvalsam*. Habitus fere *Eutypellæ* sed ascis sessiles etc.

3. **Valsa Eucalypti** Cooke et Harkn. — Syll. I, p. 127 — var. **Myrti** 4530

Roll. Bull. Soc. Myc. Fr. (1905) p. 22. — Pustulis rotundis v. oblongis, elevatis, epidermide cinctis, parallele gregariis, 1-2 mm. lat., pro more 20 perithecia includentibus; peritheciis minutis, nigris 0,25 mm. latis; stipatis; ostiolis curtis, saepe coalitis, exertis, atro-nitidis, supra gibbosis; ascis ; sporidiis cylindraceis, utrinque rotundatis, rectis curvulisve, 6-8- rarius 10 \times 1,5.

Hab. in ligno *Myrti communis*, Sa Coma in insulis Balearibus.

4. *Valsa Verbæ* Speg., Annal. Mus. Nac. Buenos Aires t. XVII (1908) 4531 p. 118. — Acervulis cortice innatis sparsis v. laxe gregariis; stromate nigro lenticulari, 0,75-1,50 mm. diam.; peritheciis 3-7, globosis, 350-400 μ . diam., membranaceis, olivaceis, ostiolis conniventibus vix exertis; ascis clavulatis, aparaphysatis, pedicello mox fluxili suffultis, octosporis, p. spor. 12-15 \times 3-4 pedicello 20-25 μ . longo; sporidiis conglobatis cylindraceis utrinque obtusis, 3-4 \times 1, e hyalino subchlorinis, minute uniguttulatis.

Hab. ad ramos emortuos *Ilicis paraguariensis*, Rep. Argentina Amer. austr.

5. *Valsa Myricæ* Jaap, Abh. Bot. Ver. Prov. Brandenb., II (1907) 4532 p. 17. — Stromatibus gregariis, totum ramum saepe obtegentibus, rotundatis, 1-2 mm. latis. pustuliformibus, cortice nidulantibus, rostello parvo rotundato crumpentibus, peritheciis plerumque circinantibus, immersis, depresso globosis, circ. 0,3 mm. latis, ostiolis confluentibus præditis, plerumque 3-6 in quoque stromate; ascis clavatis, sessilibus, quandoque basi tenuiter angustatis, supra rotundatis, 54-65 \times 7,5-9, tetrasporis; sporidiis cylindraceis, curvis, rotundatis, hyalinis, 18-24 \times 4-5, saepe minute et plus minus distincte uniguttulatis, oblique monostichis.

Hab. in ramulis siccis *Myricæ Gale* prope Geesthacht Hamburg Germania. — Socia adest plerumque *Cytospora Myricæ* Jaap.

6. *Valsa Juglandis* (Schw.) Curr. Trans. Linn. Soc. London XXII (1858) p. 279 (n. 154) t. 48, f. 145, non *Sphaeria Juglandis* Fr. (quæ *Diplodia*). — Stromatibus et peritheciis generis (non descriptis); ascis octosporis; sporidiis distichis, flavidis, 7,5-10 \times 1,7-2.

Hab. in ramis *Juglandis* sp. in America boreali.

7. *Valsa Humboldtiana* Starb., Ascom. Schwed. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 27. — Stromatibus dense sparsis, cortice immersis, conicis, disco sordide albido, peridermio adhaerente vix emergentibus, ad basim vix $1/2$ mm. diam.; peritheciis paucis, 6 in quoque stromate, plerumque orbiculatim ordinatis, ellipsoideo-cylindraceis, sensim in colla ore minutissimo pertusa, prominentia attenuatis, atris, minutissimis; ascis octosporis, anguste clavatis, 45-50 \times 6,5-7,5; sporidiis conglobatis, allantoideis v. fere cylindricis, 10-15 \times 2,5.

Hab. in ramulis aridis *Salicis Humboldtianæ*, Tarija,

Bolivia. — *V. salicinæ* (Pers.) Fr. affinis, omnibus partibus minoribus diversa.

8. ***Valsa chlorina*** Patouill., Bull. Soc. Mycol. de Fr. XXII (1906) 4585
 p. 56. — Pustulis gregariis, numerosis, ellipticis, epidermide lacerata cinctis, vix 1 mm. long., disco plano nigricante; peritheciis 3-7 in stromate granuloso luteo-viridi dein atro nidulantibus, globosis v. ovoideis, atris, coriaceis, 150-180 \approx 160, nucleo albo in collum 90-180 μ . long., 60 μ . cr., attenuatis, ostiolis atris exsilientibus; ascis cylindraceis vix stipitatis, 25-30 \approx 5, octosporis; sporidiis distichis, rectis v. leniter curvulis, continuis, hyalinis, 5-6 \approx 2.

Hab. in pericarpio *Cocos nuciferæ*, Papenoo Polynesia.

EUTYPELLA (Nits.) Sacc. — Syll. I p. 145, IX p. 460, XI p. 274, XIV p. 484, XVI p. 423, XVII p. 564.

1. ***Eutypella Prunastri*** (Pers.) Sacc. — Syll. I, p. 147 — f. ***Cratægi*** 4586
 Rehm, Ascom. exsicc. fasc. 46, n. 1894, Ann. Myc. VIII (1910)
 pag. 302. — Stromatibus intus albo-pruinosis; ascis 30-40 \approx 5-7;
 sporidiis 10-12 \approx 2,5-3.

Hab. in ramis *Cratægi Oxyacanthæ* prope Weismain in Oberfranken Germaniæ. — Ab *Eut. Cratægi* Berl. satis differt notis allatis.

2. ***Eutypella Gleditschiæ*** Berlese, Ic. fung. III, p. 73, t. 75, f. 3. — 4587
 Stromate late effuso, copioso, crustaceo, atro, per corticem interiorem serpente et haud raro ligno adnato, circa acervulos elevato, eosque ambiente et peridermium attingente; acervulis gregariis subinde confluentibus, tumidis, verruciformibus, orbicularibus, peridermio laciniato cinctis, intus albo-pruinosis; peritheciis in quoque acervulo sat numerosis, monostichis, in colla brevia attenuatis, pruina immersis, globuloso-ovoideis, haud raro mutua pressione compressis, ostiolis discretis, parum exertis, 2-4-sulcatis, nigris; ascis clavatis, parte sporif. 35-40 \approx 6-8; sporidiis allantoideis, 10-12 \approx 2, pallide chlorino-luteolis.

Hab. in ramis exsiccatis Gleditschiæ *Triacanthi* in agro Veneto Ital. bor. — Ab *Eutypa ludibunda* acervulis bene definitis dignoscenda. *Eutypellæ Cratægi* affinis. Etiam *Eutypa leprosa* — Syll. I, p. 167 — teste cl. Berlese l. c. est potius *Eutypellæ* sp.

3. ***Eutypella Stenocalycis*** Syd., Hedwigia XLIX (1909) pag. 80. — 4588
 Acervulis gregariis, plerumque rotundatis, pulvinatis, peridermio rupto cinctis, c. 1-1,5 mm. diam., cortice duriore immersis; peritheciis in quoque acervulo plus minusve numerosis, plerumque

4-10, subglobosis, minutis, collis minutis crassiusculis subconvergentibus præditis; ostiolis obtusis, distincte 4-sulcatis; ascis fusoideis, longe stipitatis, octosporis, p. sporif. 22-30 \times 4-6; sporidiis superne in asco distichis, inferne monostichis, allantoideis, obtusis, fuscidulis, 6-8 \times 2.

Hab. in ramis *Stenocalycis brasiliensis*, Para Americæ austr. (C. F. BAKER).

4. **Eutypella chilensis** Speg., *Fungi chilenses* (1910) p. 29. — *Erum-* 4589 *pens, parva, intus extusque nigra; peritheciis minutis dense con-*
stipatis brevissime ostiolatis, subglobosis, 120-150 μ . diam.; ascis
clavatis aparaphysatis, parte spor. 40 \times 7-8; sporidiis cylindraceis,
curvulis, utrinque obtusis, 10-12 \times 2,25-2,50, chlorinis.

Hab. in ramis emortuis *Eugenia multiflora*, Cerro Caracol de Concepcion Chile Amer. austr.

5. **Eutypella citricola** Syd., *Hedwigia* XLIX (1909) p. 80. — *Acer-* 4540 *vulis gregariis, rotundatis, pulvinatis, $\frac{3}{4}$ -2 mm. diam., peridermio*
rupto arete cinctis; peritheciis plus minus numerosis in quoque
acerculo, minutis, subglobosis, collis brevibus crassiusculis prædi-
tis; ostiolis obtusis, 4-sulcatis; ascis fusoideis, longe stipitatis, p.
sp. 30-35 \times 4-5, octosporis; sporidiis subdistichis, allantoideis, utrin-
que obtusis, fuscidulis, 6-8 \times 2.

Hab. in ramis *Citri Aurantii*, Pará, Brasilia (C. F. BAKER).

6. **Eutypella Murrayæ** Syd., *Hedwigia* XLIX (1909) p. 80. — *Acer-* 4541 *vulis gregariis, rotundatis vel oblongis, peridermio rupto cinctis,*
ca. $\frac{1}{2}$ -1 mm. longis; peritheciis plerumque 4-8 in quoque stro-
mate, subglobosis, minutis, collis minutis, crassiusculis præditis;
ostiolis obtusis, 4-sulcatis; ascis fusoideis, longe stipitatis, octosporis,
p. sp. 20-30 \times 5-6; sporidiis superne in asco distichis, inferne
monostichis, allantoideis, obtusis, fuscidulis, 5-7 \times 2.

Hab. in ramis *Murrayæ exoticæ*, Pará, Brasilia (C. F. BAKER).

7. **Eutypella Cordiae** Syd., *Hedwigia* XLIX (1909) p. 80. — *Acer-* 4542 *vulis gregariis, minutis, rotundatis vel irregularibus, $\frac{1}{2}$ -1 mm.*
diam., peridermio rupto cinctis; peritheciis plerumque 4-8 in quoque
acerculo, minutis, ovato-globosis, collis brevibus crassiusculis
subconvergentibus præditis; ostiolis obtusis 4-sulcatis; ascis fusoideis,
longe stipitatis, p. sp. 30-35 \times 4-5, octosporis; sporidiis disti-
chis, allantoideis, utrinque obtusis, fascidulis, 6-8 \times 2-2 $\frac{1}{2}$.

Hab. in ramis *Cordiae umbraculiferæ*, Pará, Brasilia (C. F. BAKER).

8. **Eutypella Cocos** Ferdinand. et Winge, Vidensk. Meddel. fra den 4543
natyrh. Foren. i Kiobenhavn (1908) p. 141, tab. IV, fig. 1. —
Stromatibus e basi irregulariter orbiculari subpulvinatis, 0,5-1 mm.
diam., atris, in strato exteriore lignoso epicarpii primo immersis,
deinde epidermidem pustuliformiter levantibus, ostiolis fere solis
erumpentibus, ceterum velatis, densiuscule sparsis, v. in plagulas
circ. 1 cm. diam. confluentibus; peritheciis in singulo stromate
1-20 (plerumque circ. 10), monostiche v. rarius subdistiche stipa-
tis, 200-300 μ . diam., forma varia, oblongis, subsphæroideis vel
parum applanatis, collo pro situ plus minusve longiore instructis;
ostiolis inter se liberis, cylindraceis, apice rotundatis, non sulcatis,
longitudine plerumque 200-300 μ , 75-100 μ . lat.; ascis anguste cla-
vatis, superne rotundatis, subsessilibus, parte sp. 18-24 \times 3,5-4,5,
 J -; sporidiis octonis, irregulariter distichis v. subconglobatis, al-
lantoideis, continua, hyalinis, leniter curvulis, 4-5 \times 1; paraphysi-
bus evanidis, ægre conspicuis, ascis longe superantibus (ad 125
 μ . long.).

Hab. in epicarpio sicco *Cocos nuciferae* L. in insula St.
Croix Indiæ occidentalis (F. BOERGESEN).

9. **Eutypella Longiana** Rehm, Ann. Mycol. V (1907) p. 516. — Stro- 4544
matibus gregariis, primitus peridermio innatis, dein prorumpenti-
bus, atris, demum fere sessilibus, semiglobosis, 2 mm. diam.; pe-
ritheciis 4-6 monostichis, globulosis, 0,3 mm., collis convergenti-
bus, ostiolis cylindraceis brevibus, subsulcatis; ascis fusiformibus,
longe stipitatis, p. sporif. 25 \times 6, 8-sporis; sporidiis allantoideis,
curvatulis, flavidulis, 8-10 \times 2-2,5; paraphysibus nullis.

Hab. ad ramulum? Texas (W. H. LONG jr., comm. ATKINSON).
— *Affinis Eutypellæ radulæ* (B. et Curt.) Berl.

VALSELLA Fuck. — Syll. I p. 158, IX p. 464, XI p. 275, XVII
p. 567.

1. **Valsella Cratægi** Jaap in Abhandl. Bot. Verein Brandenb. LII 4545
(1910) p. 148. — Stromatibus gregariis, ramum late obtegentibus,
e cortice pustulatum elevato erumpentibus; peritheciis numerosis,
5-12 parum prominentibus, nigris; ascis cylindraceo-clavatis, ses-
silibus 45-60 (plerumque 50) \times 5-7, demum usque ad 70 μ . long.;
sporidiis cylindraceis, rotundatis, parum incurvatis, utrinque uni-
guttulatis, 5-8 \times 1-1,5.

Hab. in ramis siccis Cratægi *Oxyacanthæ*, prope Triglitz
in Germania. — *Vals. Salicis* Fuck. affinis.

2. *Valsella alnicola* Berl. Icon. fung. III, p. 107, t. 133, f. 2, *Valsella furva* Berl. et Bresad. Microm. trid p. 13, t. I, f. 4, non Karst. — Stromatibus conico-truncatis, peridermio leviter pustulatim inflato tectis, disco minuto fuscescente; peritheciis circinantibus majusculis, collis brevibus ornatis, ostiolis integris discum vix superantibus; ascis clavatis in stipitem crassiusculum ascos longitudine aequantem tenuatis, polysporis, p. sporif. 45-55 \approx 10-13; sporidiis dense congregatis, allantoideis, curvulis, 5-7 \approx 1-1,5 melleis.

Hab. in ramis Alni glutinosæ emortuis prope Trento in agro Tridentino. — A *Valsella furva* Karst. differt stromatibus et peritheciis duplo majoribus, ascis quoque majoribus, sporidiis melleis etc.

3. *Valsella Pinangæ* Syd., Ann. Mycol. VIII (1910) p. 36. — Stromatibus gregariis, subinde lineariter dispositis, hemisphaericis vel ellipticis, 1-2 mm. longis, per peridermum erumpentibus et ejus laciinis cinctis; peritheciis 5-8 in quoque stromate, subcircinantis, subsphaeroideis, ostiolis atris, opacis; ascis anguste clavatis, apice rotundatis, sessilibus, polysporis, 60-85 \approx 10-14; sporidiis confertis, cylindraceis, rectis vel lenissime curvulis, hyalinis, 6-8 \approx 1-1 $\frac{1}{2}$.

Hab. ad truncos corticatos Pinangæ, Manila, insul. Philipp. (E. D. MERRILL).

EUTYPA Tul. — Syll. I p. 145, IX p. 460, XI p. 274, XIV p. 484, XVI p. 423, XVII p. 564.

1. *Eutypa paraphysata* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 331. — Acervulis ligno denudato dealbatoque seriatim erumpentibus, intus extusque nigris; peritheciis dense constipatis carnosulo-membranaceis 120-130 μ d., olivaceis, in ostiolum nigrum breve, crassum, stellatim rugosum productis; ascis parte sporifera subfusoidea 50 \approx 6 in pedicellum aequilongum, 40-60 \approx 2-3 productis, paraphysibus prælongis crassiusculis cinctis; sporidiis octonis vix curvulis, utrinque obtusiusculis atque minute 1-guttulatis, 8-10 \approx 2-2,5 chlorinis.

Hab. ad ramos cariosos Acaciæ melanoxyli, La Plata Rep. Argentina Amer. austr.

2. *Eutypa Tessariæ* Starb., Ascom. Schw. Chaco-Cordill. Exp. Ark. f. Bot., Bd. V (1905) p. 27. — Stromatibus corticalibus, ex matrice in substantiam carbonaceam mutata formatis, longe effusis,

irregulariter determinatis, tenuibus, lignum maculis linea nigra limitatis inficientibus; peritheciis densissime constipatis, monostichis, sphærioideis vel mutua pressione angulatis, ostiolis breviusculis, conicis, latis, tri-quadrigonis vel plerumque irregulariter gibberosis ornatis, conico-prominulis, ad basim concrescentibus, saepe ad verticem inter se Iberis, 200-250 μ . diam.; ascis octosporis, clavatis, longiuscule pedicellatis, 20-30 \times 5-6 (p. sp.); sporidiis conglobatis, allantoideis, olivascentibus, 7,5-10 \times 2,5.

Hab. in caulinis Tessariæ integrifoliæ «bubun» nominatae, ad Rio Pilcomayo Boliviæ. — Species ostiolis irregularibus distincta videtur.

3. *Eutypa lata* (Pes.) Tul. — Syll. I, p. 170 — var. *andina* Speg., 4550 An. Mus. Nac. Buenos Aires t. XIX (1909) p. 331. — Stromatibus saepius linearibus; peritheciis 250-300 μ . diam.; ascis subclavulatis 75-100 \times 5-7; sporidiis 10-12 \times 2.

Hab. ad ramos emortuos Tricyclæ spinosæ in præandinis Cacheuta, prope Mendoza, Rep. Argentina Amer. austr.

4. *Eutypa caulinova* Massee in Bancroft Handb. Diseas. West India 4551 Plants (1910) p. 22, t. III, f. 1-2 (habitus). — Ab *Eutypa erumpente*, cui habitu similis, differt charactere sporarum.

Hab. in caulinis Para rubber (qnid?) cui plagas nigras superficiales affert in Ind. occid. — Sporidia non descripta!

5. *Eutypa bacteriospora* Rehm, Ascom. exsicc. fasc. 41, n. 1759, 4552 Ann. Mycol. VI (1908) p. 118. — Stromate late effuso, epidermide plus minusve denigrata tecto, tenuissimo, nigro; peritheciis ligno intus linea tenuissima nigra circumscripto immersis, globosis, dispersis, 0,5-1 mm. diam., in collum longum abeuntibus, itaque intra epidermidis rimas transversas 2-4 confluentibus tuberculariformiterque congregatis prominentibus, ostiolis plerumque minutis interdum-usque ad 0,5 mm. cylindraceo-elongatis; ascis clavulatis, longe tenuiter stipitatis, p. spor. 15 \times 5, octosporis; sporidiis allantoideis, curvatis, unilocularibus, utrinque uniguttulatis, dilutissime flavidulis, 4 μ . long., 1,5 μ . lat.; paraphysibus?

Hab. ad ramulos plantæ scandentis, Sao Leopoldo Rio Grande do Sul Brasiliæ (Rick). — Ab *E. atomospora* (Cooke) Sacc., peritheciis ligno profunde immersis præcipue differt.

6. *Eutypa ludibunda* Sacc. — Syll. I, p. 177. — 1. f. *Anonæ Cheri-moliae* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 330. — Acerfulis corticalis noduloso-prominulis extus sordide nigris, ostiolis brevibus crassisstellato-rimosis ornatis, intus candidis; perithe-

ciis dense constipatis mediocribus 200 μ . diam.; ascorum parte sporifera subcylindracea 30 \times 4-5, pedicellum gracilem æquante, paraphysibus nullis; sporidiis vix curvulis. — 2. f. *Casuarinæ strictæ* Speg., l. c. — *Acervulis ligno denudato superficialibus irregulariter nodulosis extus intusque nigris; peritheciis polystichis subcarbonaceis* 180 μ . diam.; ascorum parte sporifera subfuscoidæ 40-50 \times 5, pedicello gracili duplo breviore suffulta, paraphysibus nullis; sporidiis vix curvulis 10 \times 2-2,5 chlorinulis. — 3. f. *Luheæ grandifloræ* Speg., l. c. p. 330. — *Corticola, dense congesta, latissime àmbiens intus extusque atra; peritheciis mediocribus 180-200 μ . diam.; ascorum parte sporifera subclavulata, 50-55 \times 10 deorsum in stipitem gracilem vix longiore productis, paraphysibus nullis; sporidiis leniter curvulis 10-12 \times 3 e hyalino subchlorinis.* — 4. f. *Maclurae aurantiacæ* Speg., l. c. p. 300. — *Acervulis et peritheciis ut in præcedenti; ascorum parte sporifera 40-45 \times 5, pedicello vix breviore suffultis, paraphysibus nullis; sporidiis leniter curvulis 10 \times 2, chlorinulis.* — 5. f. *Ricini communis* Speg., l. c. p. 331. — *Stromatibus effusis totam matricem nigrificantibus; peritheciis sub-eutypeis laxiuscule gregariis 150-200 μ . diam., ascorum parte sporifera subcylindracea 50 \times 6-7 pedicello subtriplo longiore impositis, paraphysibus nullis; sporidiis rectiusculis 10-12 \times 2, subhyalinis.* — 6. f. *Solani verbascifolii* Speg., l. c. p. 331. — *Acervulis et peritheciis ut in f. tertia; ascis sporiisque ut in præcedenti.* — 7. f. *Tamaricis africanae* Speg., l. c. p. 331. — *Acervulis et peritheciis ut in forma secunda, ascis et sporidiis ut in præcedenti.*

Hab. f. 1 prope Tucuman, f. 2, 3, 6 prope Santa Catalina, f. 4 prope Marmol, f. 5,7 prope La Plata, Rep. Argentina America austr.

7. *Eutypa linearis* Rehm, Ann. Mycol. V (1907) p. 523. — *Stroma. 4554 tibus linearibus, parallele seriatis, rectis, epidermide tectis, dein ea nigrificata et longitudinaliter discissa, elevatis, utrinque marginaliter obtectis, 0,5-3 cm. longis, vix 1 mm. latis, extus atris; peritheciis arcte monostiche aggregatis, globulosis, minutissime papillulatis, contextu parenchymatico membranaceo, fusco, glabris, ca. 250 μ . diam., sub cortice liberis; ascis fusiformibus longissime tenuiter stipitatis, p. sporif. ca. 60 μ . longa, 8-sporis; sporidiis allantoideis, curvatulis, utrinque obtusis, 1-cellularibus, hyalinis v. dilutissime flavidulis, 5-7 \times 2, di-tristichis; paraphysibus nullis.*

Hab. in culmo *Arundinariæ*, São Leopoldo, Rio Grande do

Sul, Brasilia (EICK). — Affinis *Eutypæ phaselinæ*, sed peritheciis in stromate laxioribus et vix papillatis distincta.

PERONEUTYPA Berl. — Syll. XVII p. 569.

1. **Peroneutypa heteracantha** (Sacc.) Berl. — Syll. XVII, p. 569 — 4555
1. f. **Arundinis Donacis** Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 329. — Ascis, parte sporifera, 14-20 \times 4-5; sporidiis 5-6 \times 1-1,25. — 2. f. **Anonæ Cherimoliae** Speg., l. c. — Ascorum parte sporifera 15 \times 3-4; sporidiis 4-5 \times 1. — 3. f. **Casuarinæ strictæ** Speg., l. c. — Ascorum parte sporifera 15-18 \times 3-4; sporidiis 5 \times 1. — 4. f. **Ricini communis** Speg., l. c. — Peritheciis 400-800 μ . diam., ascorum parte sporifera 12-20 \times 5-7; sporidiis eximie curvulis 4-5 \times 1,25.

Hab. ad matrices indicatas, Rep. Argentina Amer. austr.

2. **Peroneutypa tuyutensis** Speg. — Syll. I, p. 163. — 1. f. **Abutia asiatici** Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 329. — Peritheciis maximis 750-1000 μ . diam.; ascorum parte sporifera 12 \times 3-4; sporidiis curvatissimis 4-5 \times 1. — 2. f. **Arundinis Donacis** Speg., l. c. — Cum præcedente omnino conveniens. — 3. f. **Chænocephali macrophylli** Speg., l. c. p. 330. — Peritheciis 150-300 μ . diam., ascorum parte sporifera 14-18 \times 4-5; sporidiis modice curvatis 4 \times 1. — 4. f. **Citri Limettae** Speg., l. c. p. 330. — Præcedenti simillima; sporidiis valde curvatis 5 \times 1. — 5. f. **Phytolaccæ dioicæ** Speg., l. c. p. 330. — Peritheciis 230-500 μ . diam.; ascis 15 \times 4; sporidiis validissime curvatis 4 \times 1. — 6. f. **Solani verbascifolii** Speg., l. c. p. 330. — Cum præcedente omnino conveniens.

Hab. formæ 1, 2, 5, 6 prope Santa Catalina, 3 prope Tucuman, 4 prope Orán, Argentina Amer. austr.

3. **Peroneutypa exigua** Syd., Hedwigia XLIX (1909) p. 81. — Stromate late effuso, crustaceo, peridermio tecto, nigerrimo; peritheciis cortici interiori immersis, sparsis vel sæpius pluribus (3-15) acervulato-collectis, globulosis, minutis, mono-distichis, in collum longiusculum productis; rostellis plerumque per rimam fasciculato-erumpentibus, rigidis, tereti-cylindraceis, parallele erectis, c. $1\frac{1}{2}$ - $\frac{3}{4}$ mm. longis, glabris, obtusis, aterrimis; ascis fusoideo-clavatis, apice rotundatis, basi in pedicellum longum attenuatis, p. sp. 11-16 \times 3-6, octosporis; sporidiis superne in asco distichis v. conglobatis, inferne monostichis, allantoideis, minutissimis, hyalinis vel dilutissime fuscidulis, 3-3,5 \times 1-1,5.

Hab. ad corticem Citri Aurantii, Pará America austr. (C. F. BAKER).

4. **Peroneutypa valdiviana** Speg., Fungi chilenses (1910) pag. 29. — 4558
Stromate superficiem ligni late nigrificante; peritheciis globosis, 0,8-1,5 mm. diam., sparsis v. pauci-gregariis, ligno immutato infossis v. tantum insculptis vix papillato-ostiolatis; ascis pusillis clavulatis, 18 \times 5, octosporis; sporidiis cylindraceis, guttulatis, 5-6 \times 1, curvulis, subchlorinis.

Hab. in ramis emortuis Aristoteliae Macqui, Bahia de Coral Chile Amer. austr. — *Affinis P. heteracanthæ* (Sacc.).

5. **Peroneutypa cylindrica** (K. et C.) Berl. — var. **Euphorbiæ** Theiss. 4559
Beih. Bot. Centralbl. Bd. XXVII (1910) Abt. II, p. 401. — Peritheciis immersis, atris, 200-280 μ . diam., singulis v. geminatis, non vero fasciculatis, papilla cylindrica obtusata erecta, 380-460 μ . alt., 80-110 μ . cr (v. obclavatis, basi c. 170 μ . supra 75-90 μ . cr.); ascis clavatis breviter pedicellatis, 24-27 \times 4; sporidiis distichis, allantoideis, hyalino-flavidulis, biguttulatis, 4-5 \times 1.

Hab. in caule sublignoso Euphorbiæ sp. Sao Leopoldo Rio Grande do Sul Brasilia (J. RICK).

6. **Peroneutypa asperrima** Syd., in De Wildem., Flore du Bas- et Moy. Congo, t. III, fasc. I (1909) Extr. p. 15. — *Stromatibus in cortice interiore late expansis, planis, 1-4 cm. longis, 1-2 mm. cr., effusis, sed bene limitatis, intus extusque atris, duris, ubique ostiolis longe prominentibus crebris æqualiter distributis asperatis; peritheciis monostichis, subglobosis, c. 300 μ . diam.; ostiolis rigidis, atris, glabris, c. 0,50-0,75 mm. longis; ascis clavatis v. fusoideis, longe pedicellatis, p. sp. 16-20 \times 3-4, octosporis; sporidiis allantoideis, leviter curvulis, hyalinis, continuis, utrinque minute 1-guttulatis, c. 3,5 \times 1.*

Hab. ad cortices, Kisantu Congo Africæ (VANDERYST).

PERONEUTYPELLA Berl. — Syll. XVII p. 569.

1. **Peroneutypella corynóstomoides** Rehm, Ascom. exsicc. fasc. 41, 4561 n. 1760, Ann. Mycol. VI (1908) p. 119. — *Stromate late effuso, peridermio tecto, a corticis substantia heterogeneo, crustaceo, nigro, hinc inde circa perithecia acervulatim collecta parum elevato; acervulis gregariis, 1-2 mm. diam., vix tumidulis; peritheciis cujusque acervuli in hypodermio supra lignum nigro-cinctis, 10-15 rarius 1-5, globulosis, 0,5-0,7 mm. diam., collis longis, fasciculatim prorumpentibus, cylindraceis, extra peridermum demum divergen-*

tibus, scabriusculis v. rugulosis, interdum subconoideo-elongatis apiceque acutatis, ostiolis plerumque obtusis, 3-4 sulcatis, conoideis, 1-3 mm. long., 0,4 mm. lat., fusco-nigris; ascis clavatis, longe stipitatis, p. sporif. 25 ~ 6, octosporis; sporidiis oblongis, obtusis, vix allantoideis, unilocularibus, uniguttulatis, subfuscis, 5-6 ~ 2, distichis; paraphysibus filiformibus, septatis, 3 μ . cr.

Hab. ad ramum arboris frondosæ, São Paulo Rio Grande do Sul Brasiliæ (RICK). — *Per.* *corynóstoma* (B. et R.) Berl., affinis, sed differt stromatibus et peritheciis validioribus, sporidiis brunneis vix incurvatis.

2. *Peroneutypella appianata* Syd., in De Wildem., Flore Bas- et Moy. Congo t. III, fasc. I (1909) Extr., p. 16. — Stromatibus effusis, peridermio tectis, atris, carbonaceis, 3-8 mm. latis, $\frac{1}{2}$ - $\frac{3}{4}$ mm. cr.; peritheciis hinc inde aggregatis, 1-2-stichis, globulosis, 0,2-0,3 mm. c. diam.; ostiolis numerosis, per peridermum erumpentibus, cylindraceis, glabris, rectis, c. 1,5 mm. longis, versus apicem subacutatis; ascis clavatis, p. sporif. c. 20 ~ 4, octosporis; sporidiis oblongis, saepe leviter curvulis, utrinque rotundatis minuteque guttulatis, hyalinis, continuis, c. 3,5-4,5 ~ 1,5-2, distichis.

Hab. ad cortices, Kisantu Congo, Africæ (VANDEBYST).

3. *Peroneutypella Noackii* Rehm, Ann. Mycol. V (1907) p. 523. — 4563 Stromatibus emergentibus, dein in cortice interiore libere sessilibus, gregariis, orbicularibus, semiglobosis, atris, carbonaceis, 0,5-1 cm. diam., 3 mm. alt., ostiolis plurimis cylindraceis, glabris, rectis, 2 mm. longis, versus apicem subacutatis obsessis, intus nigro-cinereis; peritheciis 2-3-stichis, glebosis, plurimis, c. 0,3 mm.; ascis clavatis, p. sporif. 20 ~ 5, octosporis; sporidiis cylindraceis, curvulis, hyalinis, 1-cellularibus, 4 ~ 1 distichis; paraphysibus nullis.

Hab. in cortice arboris, São Francisco dos Campos, Prov. São Paulo Brasilia (NOACK). — Stromate ostiolis omnino cooperato et innumera perithecia fovente mox dignoscenda species.

4. *Peroneutypella obesa* Syd., in De Wildem. Flore Bas- et Moy. Congo t. III, fasc. I (1909) Extr. p. 16. — Stromatibus emergentibus, dein in cortice interiore libere sessilibus, gregariis, orbicularibus, semiglobosis, atris, carbonaceis, 0,8-1,5 cm. diam., usque ad 1 cm. altis, saepe dense confertis et subconfluentibus, e mutua pressione angularibus, intus nigro-cinereis; peritheciis plurimis, 3-5-stichis, globosis, 0,5-0,6 mm. diam.; ostiolis numerosissimis, cylindraceis, glabris, rectis, 2-4 mm. longis, versus apicem subacutatis; ascis fusideo-clavatis, longe pedicellatis, p. spor. 10-12 ~ 4,

octosporis; sporidiis minutissime allantoideis, hyalinis, continuis, utrinque minutissime 1-guttulatis, 2-2,5 \times 1.

Hab. ad cortices, Kisantu Congo, Africæ (VANDERYST). — A *Per. Noacki* Rehm differt stromatibus majoribus, ostiolis magis elongatis et characteribus sporidiorum.

ENDOXyla Fuck. — Syll. I p. 181, IX p. 469, XI p. 275, XVII p. 570.

1. **Endoxyla** Yerbæ Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4565 (1908) pag. 118. — Peritheciis sparsis, ligno denudato immersis, stromate heterogeneo extus fuscescente, intus albescente linea nigra tenui limitata cinctis, globosis, 300-600 μ . diam., tenui-membranaceis, fuscis, ostiolo brevissimo vix manifesto coronatis; ascis numerosis constipatis antiee clavulatis, 14-16 \times 3-4, pedicello duplo longiore mox fatiscente suffultis, octosporis, a paraphysatis; sporidiis cylindraceis leniter curvulis utrinque obtusis 4-5 \times 1, hyalinis, minute uniguttulatis.

Hab. ad ramos emortuos decorticatos Ilicis paraguariensis in silvis circa San Pedro Argentinæ Amer. austr.

2. **Endoxyla** Mangiferæ P. Henn., Hedwigia XLVII (1908) p. 258. 4566 — Stromatibus ligno innatis peritheciis gregariis immersis, atris, ostiolis subulatis superantibus; ascis stipitatis clavatis, 8-sporis, 30 \times 6; sporidiis subdistichis cylindraceis, curvatis, fuscidulis, 6-7 \times 2.

Hab. in ligno emortuo Mangiferæ indicæ, Mindanao, Davao Ins. Philippin. (COPELAND).

CRYPTOSPHÆRIA Grev. — Syll. I p. 182, IX p. 470, XIV p. 486, XVI p. 426.

1. **Cryptosphaeria** ? Cumingii Speg., Fungi Chilenses (1910) pag. 82 4567 cum icon. — Peritheciis epidermide subrelaxata stromatico que nigricata tectis, laxe gregariis, lenticularibus minutis carbonaceis, 150 μ . diam.; ascis subcylindraceis modice attenuato-pedicellatis paraphysatis 65-70 \times 7-8; sporidiis subdistichis subfusoideis, parvis, pallide olivaceis, 3-septatis leniter constrictulis, 16-18 \times 4, loculo medio supero non v. vix subcrassiore.

Hab. in culmis siccis putrescentibus Chusqueæ Cumingii Cerro Alegre de Valparaiso Chile Amer. austr.

2. **Cryptosphaeria** curvispora Starb., Ascom. Schwed. Chaco-Cordill. 4568 Exp., Arkiv f. Bot. Bd. V (1905) p. 28. — Stromate nullo, nisi matricis superficie ex fungillo obsesso paullum elevata indicato;

peritheciis discretis, interdum nonnullis confluentibus et acervulatim erumpentibus, plane in cortice immersis, basi non ligno affixis, globosis, ostiolis longiusculis, cylindricis, superne paullum dilatatis, 4-6-sulcatis vel potius verruculis 4-6 ornatis, ore latiusculo pertusis prominulis, membranaceis, atratis, 300-500 μ . diam.; ascis octosporis, clavatis, 10-15 \times 4-5 (p. sp.); sporidiis conglobatis, allantoideis, valde curvatis, fuscidulis, 2,5-3 \times 1,5; paraphysibus nullis.

Hab. ad ramos Soururo, inter Tarija et Chaco Boliviæ. — Fungillus minutie partium interiorum nec non ostiolis mox dignoscendus.

CRYPTOSPHÆRELLA Sacc. — Syll. I p. 186, IX p. 470.

1. **Cryptosphærella Anonæ** Speg., An. Mus. Nac. Buenos Aires t. XIX 4569 (1909) p. 333. — Stromate latissime effuso, cortice immutato nudante, ligno vix cinerescente incidenti; peritheciis hinc inde dense constipatis corticem subtumefacentibus carbonaceis tenuibus, e globoso ellipsoideis 300-500 \times 250-300, ostiolo minuto carbonaceo vix exerto coronatis; ascis 32-sporis, aparaphysatis antice obtusiusculis postice modice graciliterque attenuato-pedicellatis, p. spor. 80 \times 15-20, ped. 30-40 \times 5; sporidiis leniter curvulis 12 \times 2,5-3 utrinque obtusiusculis, eguttulatis, chlorinis.

Hab. ad ramos dejectos putrescentes *Anonæ* Cherimoliæ prope Tucuman Argentina, Amer. austr.

2. **Cryptosphærella Mate** Spegazz., Ann. Mus. Nac. Buenos Aires 4570 t. XVII (1908) p. 119. — Stromatibus ligno denudato viy infuscato prominulis, linearibus, colliculosis extus sordide pallescentibus; peritheciis minutis stromate hinc inde gregariis vix papillulato-ostiolatis, globosis 125-350 μ . diam.; ascis aparaphysatis clavatis longe pedicellatis, parte spor. 75-80 \times 12, stipite longiusculo 75-100 μ . long., 32-48-sporis; sporidiis conglobatis e cylindraceo navicularibus, chlorinis, 8-16 \times 3, minute 1-guttulatis.

Hab. ad ramos aridos subputrescentes decorticatosque *Ilicis paraguariensis* in dumetis prope San Pedro Argentina, Amer. austr.

CRYPTOVALSA Ces. et De Not. — Syll. I p. 187, IX p. 471, XI p. 276, XIV p. 487, XVI p. 426, XVII p. 567.

1. **Cryptovalsa chilensis** Speg., Fungi chilenses (1910) p. 30. — Peritheciis dense constipatis numerosis carbonaceis subsuperficialibus

globosis parvis eximie breveque papillato-ostiolatis, 250-300 μ . diam.; ascis clavulatis apice subtruncatis, a paraphysatis 32-sporis, 120 μ . long., parte spor. 70-80 \approx 8-10; sporidiis 2-3-stichis, cylindraceis, fumosis, 9-11 \approx 1,5-2, utrinque obtusis.

Hab. ad ramos sicclos vetustos decorticatos *Proustia* pungentis, Batuco Chile Amer. bor.

2. *Cryptovalsa Yuccæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4572 (1909) p. 332. — Substrato denudato dealbatoque (an causa heterogenea?); stromatibus effusis sublinearibus extus nigris intus albis (10-15 mm. long., 3-6 mm. lat.), planiusculis; peritheciis hinc inde gregariis monostichis, acervulos prominulos irregulariter subhemisphæricos 1-3 mm. diam. efficientibus, parvulis, 150 μ . diam., ostiolo carbonaceo vix exertulo coronatis; ascis antice obtusis postice sensim attenuato-pedicellatis 100-120 \approx 12-15; sporidiis cylindraceis utrinque obtusiusculis 7-10 \approx 2 eguttulatis, leniter curvulis.

Hab. ad scapos florales exaridos putrescentes *Yuccæ* gloriae in hortis La Plata, Argentina Amer. austr. — *Crypt. Nitschkei* affinis, ascis majoribus matriceque dealbata recedens.

DIATRYPE Fr. — Syll. I p. 191, IX p. 472, XI p. 276, XIV p. 487, XVI p. 426, XVII p. 571.

1. *Diatrype valdiviensis* Speg., Fungi Chilenses (1910) pag. 30, cum 4573 icon. — Stromatibus parvis erumpenti-superficialibus squarrulosis sordide fuscescentibus, intus albescentibus; peritheciis 4-20 constipatis, globosis, parvis, stromate immersis, fulvo-fuscescentibus; ascis clavulatis longiuscule pedicellatis, a paraphysatis, parte spor. 30-40 \approx 5-6; sporidiis cylindraceis utrinque obtusis 8-9 \approx 2, subgutulatis subchlorinis.

Hab. in ramis emortuis *Perseæ* Lingue prope Ciudad de Valdivia Chile Amer. austr.

2. *Diatrype annulata* Theiss., Beih. Bot. Centralbl. XXV Bd. (1910) 4574 Abt. II, p. 401. — Stromatibus gregariis, discretis, erumpentibus, corticis laciniis cinctis, semigloboso-pulvinatis, 0,7-1,2 mm. diam., opacis, nigris, asperulis, intus albis; peritheciis globosis, e latere plerumque compressis, 2-5 in quoque stromate, parietibus tenuibus, 250-400 μ . diam., papilla minuta, hemisphærica nigro-opaca, annulo fusco applanato cinctis; ascis cylindraceis, modice pedicellatis, supra rotundatis, p. sp. 28-32 \approx 5-6; sporidiis vermicularibus hyalino-flavidulis, distichis, 7-9 \approx 2-2,5.

Hab. ad ramos sicclos Compositæ cujusdam, Sao Leopoldo

Rio Grande do Sul Brasiliæ. — *Diatrype asterostomati* B. et C. affinis.

3. **Diatrype Baccharidis** Earle, Bull. of the New York Bot. Gard. 4575 (1904) p. 295. — Stromatibus dense sparsis, quandoque prominentibus, fibris ligneis cinctis, demum nudis, nigris, rugosis, stromate parco, intus obscure flavido-brunneis, 1 mm. circ. cr., saepe subconfluentibus; peritheciis 3 v. 4 ad 6-8 in quoque stromate, latis, 300-500 μ ., subangulosis, intus nigris, ostiolis superficiem rugulosam reddentibus, compressis v. obscure bisulcatis (subhysterioideis), collo brevi; ascis clavatis, circ. 70 \times 7; sporidiis curvis, cylindricis, flavidis, 12-14 \times 2-3.

Hab. in caulinibus emortuis Baccharidis sp., Stanford Univ. California Amer. bor. (C. F. BAKER).

4. **Diatrype leucoxantha** Rehm in Rehm et Rick in Broteria V (1906) 4576 p. 226. — Stromatibus gregariis demum liberis in ligno denudato atroinquinato sessilibus, irregulariter orbicularibus, 1-1,5 mm altis, 2-4 mm. latis, basi subcontractis, glabris, vertice applanatis, undulato-verruculosis, nigro - fuscis, carbonaceis, intus sub cortice strato albo præditis, sub peritheciis flavo; peritheciis 10-12 arcte congregatis, monostichis, globosis, 0,7-0,8 mm. diam. papillulis minutissimis in vertice stromatis conspicuis; ascis tenerrimis, longissime stipitatis, parte sporifera fusiformi, 20-30 \times 5; sporidiis alantoideis, dilute flavidulis 1-cellularibus, 7,5 \times 2, octonis, distichis; paraphysibus?

Hab. in ligno arboris frondosæ in Brasilia. — *Diatr. chlorosarcæ* affinis.

5. **Diatrype mindanaensis** P. Henn., Hedwigia XLVII (1908) p. 258. 4577 — Stromatibus innato-erumpentibus dein superficialibus gregariis, pulvinatis v. orbiculare disciformibus, atro-carbonaceis, rugulosis, 1-1,5 mm. diam., loculis immersis numerosis, globulosis; ascis stipitatis clavatis, 8-sporis; sporidiis subdistichis, cylindraceis, curvulis, fuscidulis, 6-7 \times 2.

Hab. in ramulis siccis arboris, Mindanao, San Ramon, Zamboanga Ins. Philippin., majo 1904 (COPELAND).

6. **Diatrype utahensis** Rehm, Ann. Mycol. V (1907) p. 516. — Stromatibus dispersis, sub cortice nidulantibus, prorumpentibus, laci-niis corticis arcte adhaerentibus cinctis, subconoideis, apice truncatis, a matricis substantia heterogeneis, extus atris, intus fuscidulis, 1-1,5 mm. diam.; peritheciis monostichis, globulosis, ca. 300 μ . diam., haud numerosis, ostiolis vix in disco stromatis conspi-

cuis; ascis fusiformibus, stipitatis, 55-60 \times 9, octosporis; sporidiis oblongis vel subcurvatulis, hyalinis, 1-cellularibus, 12-14 \times 4, distichis; paraphysibus . . .

Hab. in ramulo? Rock Canyon, Proro, Utah 2700 m. alt. U. St. Am. (Miss FLETCHER, comm. ATKINSON). — Subaffinis *D. verrucoidi*, sed sporidia non vere allantoidea, minora et ostiola non stellato-sulcata.

7. **Diatrype Fletcheri** Rehm, Ann. Mycol. V (1907) p. 516. — Stromatibus gregariis, seriatim aggregatis, sub cortice nidulantibus, prorumpentibus, laciniis vix adhaerentibus cinctis, a matrix substantia heterogeneis, orbicularibus, convexulis, extus nigris, 2-4 mm. diam., intus fuscidulis; peritheciis permultis, monostichis, stromate immersis, globulosis, ca. 300 μ . latis, collo brevi instructis, papillulis parvulis conoideis plus minusve prominentibus, contextu parenchymatico violaceo-brunneo; ascis fusiformibus, tenerimis, longe stipitatis, p. sporif. 40-45 \times 10, tetrasporis; sporidiis oblongis, rectis, vix aliquantulum curvatulis, hyalinis, 1-cellularibus, 12-15 \times 5, monostichis; paraphysibus . . .

Hab. ad ramulos? Rock Canyon, Proro, Utah, U. St. Am. c. 2700 m. alt. (Miss FLETCHER, comm. ATKINSON). — Subaffinis forte *Diatr. Macluræ*.

8. **Diatrype infuscans** Ell. et Ev. North Amer. Pyren. (1892) p. 571. 4580 — Stromatibus gregariis, 1-1,5 mm. diam., conico-hemisphaericis v. tuberculiformibus, epidermide nigricante tectis, apice prominentibus; peritheciis 3-6 in quoque stromate, globosis, 250-350 μ . diam., parietibus tenuibus donatis, apice collo brevi contractis et ostiolo lato tuberculiformi praeditis; ascis basi anguste stipitatis, parte sp. 25 \times 4, octosporis, paraphysibps filiformibus obvallatis; sporidiis distichis, allantoideis, leniter curvulis, pallide flavidis, 5-6 \times 1,2-1,5.

Hab. in ramis emortuis Smilacis sp., Houston Texas Amer. bor. (RAVENEL). — A *Diatr. smilacicola* (Schw.) sporidiis et stromate diversa.

9. ? **Diatrype petiginosa** Fr. in litt. ad Mougéot, Currey in Trans. Linn. Soc. XXII (1858) p. 271, n. 87, t. 46, f. 86. — Stromatibus verrucosis; peritheciis generis (non descriptis). ascis fusideo-clavatis, deorsum sensim tenuato-stipitatis, octosporis; sporidiis subdistichis, allantoideis, utrinque subrotundatis, leviter curvis, 10-15 \times 2-2,5, flavidis.

Hab. ad cortices in ? Vogesis.

Syll. fung. XXII (VIII-1912)

DIATRYPELLA Ces. et De Not. — Syll. I p. 200, IX p. 477, XI p. 277, XIV p. 488, XVI p. 427, XVII p. 572.

1. **Diatrypella Missionum** Speg., Annal. Mus. Nac. Buenos Aires t. XVII 4582 (1908) p. 119. — Stromatibus cortice innatis erumpenti-prominulis verruculosis nigris, irregulariter ellipsoideis, 4-5 mm. long., 2-8 mm. lat., 1,5 mm. alt.; peritheciis monostichis immersis constipatis globosis 350-400 μ . diam., brevissime crasseque ostiolatis; ascis fusoideo-clavulatis antice acutis postice breviter pedicellatis, a paraphysatis, polysporis, 80-100 \times 10-12; sporidiis conglobatis cylindraceis leniter curvulis, utrinque obtusiusculis 4-8 \times 1. chlorinulis, minute uniguttulatis.

Hab. ad ramos emortuos adhuc pendulos Ilicis paraguariensis in silvis Campo das Cuias Rep. Argentina Amer. austr.

— *D. verruciformi* (Ehrh.) Nits. affinis sed ascis fusoideis apice acutis breviter pedicellatis sporidiisque tenuioribus sat distincta.

2. **Diatrypella Persicæ** Rick, Broteria IV (1905) p. 162. — Stroma 4583 tibus prorumpentibus, corticem in 3-4 partes dilacerantibus, ceterum cortice ad medianam altitudinem tectis, parum prominentibus, foraminibus inter se junctis materia stromatico, vix conspicuis, nigris; peritheciis pluribus, orbicularibus, parvis, ordine congestis inter lignum et epidermidem nidulantibus, lignum circulis nigris circumscribentibus; ascis longe pedicellatis, multisporis, parte sp. 100-150 \times 10-12; sporidiis 14-17 \times 4, flavovirentibus; paraphysibus dilutis.

Hab. in ramis Persicæ vulgaris, Torres Vedras Lusitaniae.

3. **Diatrypella inflata** Rick, Broteria V (1906) pag. 48. — Stromate 4584 pulvinato, 2 mm. diam., lobis epidermidis arce cincto, extus intusque atro; peritheciis inter lignum et epidermidem nidulantibus, 1 mm. latis, atris, 3-10 unitis, ostiolis obtusis; ascis longissimis, parte spor. 80-100 \times 15, juvenilibus versus apicem in capitulum sphæricum inflatis, quod in multis semper manet, ceterum ventricosis, polysporis; sporidiis viridi-flavis, conglobatis, 6-8 \times 2, plerumque curvulis.

Hab. in ramis Nerii Oleandri, Rio Grande do Sul Brasilæ. — An eadem ac *Diatr. platensis* Speg.?

4. **Diatrypella Lantanæ** Earle, Bull. of the New York Bot. Gard. 4585 (1904) p. 311. — Stromatibus sparsis, prominentibus, epidermide cinctis, intus extusque nigris, stromate parco, plerumque ellipsoideis, circ. 1 \times 0,75 mm.; peritheciis in quoque stromate 4-10, nigris, globosis, 400-500 μ . diam., ostiolo brevi, levi, umbilicato;

ascis late clavatis, sporidiis farctis, breviter stipitatis, 70-80 \times 10-12; sporidiis numerosissimis, allantoideis, flavis, circ. 7 \times 1,5.

Hab. in ramis emortuis Lantanae Camaræ, Hog Island Florida (S. M. TRACY).

5. *Diatrypella decorata* Nits. — Syll. I, p. 203. — Var. *major* Berl. 4586 Icon. fung. III, pag. 119, t. 158. — A typo differt stromatibus ascisque majoribus, magis regularibus, non rugosis; ascis 45-50 \times 6-7 p. sporif.; sporidiis 4-5 \times 1, vix viridulis.

Hab. in ramis Fagi in agro Romano. — Affinis quoque *D. verruciformi* sed stromatibus minoribus, non rugosis, ostiolis eximie 4-5-sulcatis, ascis tenuioribus mox dignoscenda.

6. *Diatrypella macrotheca* Starb., Ascom. Schwed. Chaco-Cordill. 4587 Exped., Arkiv f. Bot. Bd. V (1905) p. 26. — Stromatibus basi ligno affixis, vix penetrantibus, per peridermum erumpentibus, gregariis, tubercularibus, ellipsoideis v. fere sphæroideis, $1\frac{1}{2}$ -2 mm. diam., sæpe et longitudinaliter et transversim confluentibus, usque ad 5 mm. longis, atratis vel potius obscure rufo-furfuraceis, intus demum pulveraceis; candidis; peritheciis paucis, mono-polystichis, ovoideo-sphærioideis, mutua depressione difformibus, ostiolis latis, primo quadrangulatim limitatis et quadrisulcatis, deinde orbicularibus, umbilicatis, margine lenissime radiatim sulcatulo, c. 200 μ . diam.; ascis polysporis, longissime pedicellatis, parte sporifera clavata, sursum obtuse rotundatis, 130-190 \times 11,5-17, p. spor. c. 75 μ . long.; sporidiis conglobatis, olivaceis, solitariis hyalinis, allantoideis, 5-7 \times 1,5-2; paraphysibus nullis.

Hab. in ramis aridis, Prov. Jujuy, Quinta, pr. Laguna de la Brea, Argentina. — Species ascis longissimis, ostiolis peritheciorum distincta videtur.

7. *Diatrypella Fourcroyæ* Vouaux, Bull. Soc. Myc. Fr. (1910) p. 155. 4588 — Stromatibus irregularibus, verrucæformibus, plerumque ellipsoideis, 0,75-1,5 mm. long., 0,5-1 mm. latis, gregariis, disco tantum emergentibus, peridermio innatis insidentibusque ligno, cujus superficiem totam nigrificantibus, nigris; peritheciis paucis, 1-6, sæpius 2- vel 3 in singulo stromate, subglobosis, dense stipatis, ostiolo brevi parumque prominulo, levi v. sulcato instructis; ascis longissime pedicellatis, clavatis, parte spor. 50-60 \times 12-13; stipite 100-120 μ . long.; sporidiis numerosis præditis, pseudoparaphysatis; allantoideis, curvulis, fuscidulis, 5 \times 1.

Hab. in caule Fourcroyæ giganteæ, Magenta prope Nouméa, Nova-Caledonia (CACOT).

Sect. 2. Hyalosporæ.

CRYPTOSPORELLA Sacc. — Syll. I p. 466, IX p. 609, XIV p. 525, XVI p. 468, XVII p. 592.

1. **Cryptospora Wagneriana** Rehm, Ann. Mycol. IV (1906) p. 475. 4589
— Stromatibus valsoideis, cortice plane immutato omnino immersis, gregariis, seriatis, corticem extus denigratum subelevantibus, nulla linea circumscriptis; peritheciis c. 12, globosis, 0,1-0,2 mm. diam., laxe orbiculariter positis, collis tenuissimis in disculo ruguloso, suborbiculari, flavidulo, c. 0,25 mm. lat. conjunctis, corticem superantibus ibique ostiolis minutissimis nigris conspicuis; ascis oblongo-ellipsoideis, 60-70 \approx 15, octosporis; sporidiis oblongis, utrinque rotundatis, rectis v. curvulis, unilocularibus, hyalinis, 18-27 \approx 6-7, distichis.

Hab. in ramis emortuis Aceris Pseudoplatani, Wintberger Saxonia, Germania. — A *Cr. Niesslii* differt præcipue sporidiis majoribus oblongis nec fusoideis.

2. **Cryptospora eupatoriincola** Rehm, Ann. Mycol. V (1907) p. 525. 4590
— Stromatibus ramulum hypertrophicum ambientibus, arcte congregatis, hemisphæricis, peridermio demum extus nigrescente tectis, cortice intus linea nigra non circumscripto innatis; peritheciis c. 5 globulosis, membranaceis. 0,7-1 mm. diam., irregulariter conglomeratis, collis in disculum suborbicularem convergentibus, papillulis nigris, hemisphæricis atris, poro vix perspicuo pertusis, demum scabriusculis verrucose prominentibus; ascis fusiformibus, c. 50 \approx 15, octosporis; sporidiis oblongis, utrinque rotundatis, 12-15 \approx 5-6, subhyalinis, strato mucoso obductis, 1-cellularibus; paraphysibus nullis.

Hab. ad ramulum Eupatoriæ bupleurifolii, Tubaao Brasilia (ULE, comm. PAZSCHKE).

Sect. 3. Phæosporæ.

ANTHOSTOMA Nits. — Syll. I p. 293, IX p. 514, XI p. 283, XIV p. 503, XVI p. 441, XVII p. 635.

1. **Anthostoma acerinum** Ell. et Fairm., The Pyren. of Orleans Co. 4501
unty in Proced. Rochester Acad. IV (1905) pag. 189. — Stromate

valsoideo, 1 mm. cr., ligno infosso; peritheciis 4-6, globosis, parvis ($\frac{1}{4}$ mm.), collibus convergentibus, ostiolis minutis papilliformibus disco tuberculiformi erumpentibus; ascis cylindraceis, paraphysatis; sporidiis monostichis, oblongis, brunneis, continuis, 7-10 \times 4-5.

Hab. in truncu acerino, Lyndonville N. Y. Amer. bor.

2. **Anthostoma argentinense** Spegazz., An. Mus. Nac. Buenos Aires 4592 t. XIX (1909) p. 341, — Peritheciis subglobosis majusculis, 1-1,5 mm. diam. plus minusve matrici extus cinerescenti infossis; ascis cylindraceis breviuscule pedicellatis, paraphysatis, octosporis, p. sp. 180-200 \times 15-20; sporidiis elipsoideo-navicularibus submajusculis opace fuligineis, primum pallidis, 2-guttulatis, 25-32 \times 12-14.

Hab. ad ramos decorticatos Prosopidum prope Alto Grande, San Luis Rep. Argentina. Amer. austr. — *Anth. gallico* Sacc. et Flag. affinis.

3. **Anthostoma pulchellum** Schulzer ap. Hazsl. Sphær. Hung. p. 231, 4593 t. XV, f. 58. — Stromatibus e basi plana conoideis, cortice pubescens elevato tectis, dein erumpentibus; peritheciis 15-20 circinantibus globulosis, stromate immersis, in colla duplo triplo longiora, filiformia, convergentia attenuatis, disco minuto; ascis tereti-clavatis, apice rotundatis breviter tenuato-stipitatis, octosporis; sporidiis oblique monostichis, ellipsoideis v. ovoideis, minutis 5-8 \times 2-3, brunneis, 1-2-guttulatis.

Hab. in ramis Pruni Cerasi, Vinkovce Hungariæ (SCHULZER).

4. **Anthostoma tripunctatum** (Bon.) Sacc. et Trav. — Syll. XIX, 4594 p. 75 — *Ascospora tripunctata* Bonord. Handb. Myk. p. 63, t. III, f. 71. — Peritheciis ligno omnino immersis et illud nigrificantibus, globosis, ostiolo non exerto erumpentibus; ascis anguste clavatis, deorsum tenuato-stipitatis, apice rotundatis, stipite crassissimo; paraphysibus filiformibus; sporidiis oblique monostichis, tereti-ellipsoideis utrinque obtuse rotundatis, rectis, triguttatis, impellucidis, demum cirrose expulsis.

Hab. in ligno putrescente in Germania. — Diagnosis ex icone deprompta.

5. **Anthostoma Cocoes** v. Höhnel, Fragm. z. Mykol. Sitzb. k. Ak. d. Wiss. Wien Bd. CXVI, Abt. I (1907) pag. 124. — Stromatibus immersis, tenuibus, effusis, nigris, elongatis, nitidis, magnitudine variabilibus, saepe confluentibus, superficie levi; peritheciis depressis laxiusculis saepe lineariter dispositis, 300 μ . circ. diam., ostiolis non prominentibus; contextu peritheciis crasso, carbonaceo; paraphysibus numerosis, filiformibus, guttulato-farctis, mucosis; ascis

cylindraceis, octosporis, 80-90 \times 3,5-4; sporidiis monostichis, violaceo-brunneis, unilocularibus, elongato-ellipsoideis, saepe lateraliter depresso, utrinque angustatis, obtusulis v. acutatis, 7-10 \times 2,5-3.

Hab. in petiolis siccis foliorum Cocoës nuciferæ, Malife Samoa (RECHINGER). — *A. versicoloris* Starb. affine.

6. *Anthostoma chusqueicola* Speg., Fungi Chilenses (1910) pag. 44, 4596 cum icon. — Maculis nullis; peritheciis laxe gregaris globosis ligno immersis, membranaceis 250-350 μ . diam.; ascis cylindraceis breviter pedicellatis paraphysibus filiformibus commixtis, 250-300 \times 10-12; sporidiis navicularibus mediocribus, fuligineis, primo tunica mucosa hyalina tenui saepe parum perspicua vestitis dein nudis 26-30 \times 9-10.

Hab. in culmis putrescentibus Cusqueæ Cumingii, Cerro Alegre de Valparaiso, Chile Amer. austr.

LOPADOSTOMA (Nke., 1867) Traverso, Fl. ital. crypt. II, fasc. I (1906) p. 169, *Fuckelia* (Nits. in Fuck 1869) (Etym. *lopas* velum et *stoma* ostium). — A gen. *Anthostoma* differt peritheciis in stromata discreta, suborbicularia initio peridermio velata (valsea nec eutypea) conjunctis; cetera eadem. — Huc ducendæ sunt species: *Lopadostoma gastrinum* (Fr.) Trav. l. c. (*Anthostoma gastrinum* (Fr.) Sacc. — Syll. I, p. 303). — *Lop. Massaræ* (De Not.) Trav. l. c. (*Anthostoma Massaræ* (De Not.) Sacc. — Syll. I, p. 306). — *Lop. turgidum* (Pers.) Trav. l. c. (*Anthostoma turgidum* (Pers.) Nke — Syll. I, p. 303). — *Lop. tæniosporum* (Sacc.) Trav. l. c. (*Anthostoma tæniosporum* Sacc. — Syll. I, p. 304).

1. *Lopadostoma juglandinum* (Rehm) Sacc. et Trott. — *Anthostoma* 4597 (*Lopadostoma*) *juglandinum* Rehm, Ann. Mycol. VII (1909) p. 531. — Stromatibus cortice extus denigrato intus albo, linea nigra circumscripto arcte gregarie innatis, in rimis cortici lineariter usque 2 cm. longe et 2 mm. late expansis, præterea ellipticis v. lenticulariter orbicularibus, 1-2 mm. diam., atris, peridermio adhaerente cinctis, papillulis semiglobosis poro pertusis coronatis; peritheciis globosis 5-12 arcte congregatis, 0,5 mm. diam. monostichis; ascis cylindraceis c. 130 \times 6-7, parte sporif. 70 \times 5, octosporis; sporidiis oblongis, utrinque rotundatis, rectis v. subcurvatis, unicellularibus, utrinque 1(-3)-guttatis, fuscidulis, 8-10 \times 3-3,5, monostichis; paraphysibus filiformibus.

Hab. ad corticem Juglandis, Port Byrera Illinois Amer. bor. (E. T. et S. A. HARPER). — *Anth. turgido proximum*. —

- var. **Caryæ** Rehm, l. c. p. 532. — Stromatibus parallele confluentibus, emergentibus, a peridermio marginatis, utrinque obtusis, nigris, pulverulentis, usque ad 4 cm. longis et 3 mm. latis, ostiolis haud perspicuis, usque ad 2 mm. altis; ceterum ut in *A. juglano*dino. — Ad corticem Caryæ albæ, River Forrest Ill., Amer. bor. (E. T. et S. A. HARPER).
2. **Lopadostoma turgidum** (Pers.) *Anthostoma turgidum* (Pers.) Nits. 4598 — Syll. I, pag. 303 — var. **minus** Sacc., Annal. Mycol. VI (1908). — A typo differt quia omnibus partibus minus ostiolisque brevioribus, paucioribus; ascis 84-90 \approx 6,5-7; sporidiis ellipsoideis, 8-9 \times 4,5-5, æque 2-guttatis, fuligineis.
- Hab.* in cortice, ut videtur, Quercus vel Castaneæ prope Parisios Galliæ. (P. HARIOR).
3. **Lopadostoma dubium** (Feltg.) Sacc. et Trott, *Anthostoma dubium* 4599 Feltg. Vorstud. Pilz. Luxemb. I (1899) p. 179, II (1901) p. 111. Peritheciis plerumque valsoideo-aggregatis, rarius subsparsis, nigris, peridermio tumidulo sed immutato tectis, globosis ostiolis conoideis vix emergentibus; ascis cylindricis 75-85 \times 6-7, filiformi-paraphysatis; sporidiis oblique monostichis, ellipsoideis, leniter inæquilateris, continuis, 12-15 \times 4-6, brunneis, saepe 2-guttulatis.
- Hab.* in ramis corticatis Coryli Avellanae, Bartringen Luxemburgiæ. — Ex auctore ipso potius ad subg. *Lopadostoma* duocanda species.

Sect. 4. Hyalodidymæ.

- MELANCONIS** Tub. — Syll. I p. 602, IX p. 700, XIV p. 543, XVI p. 492, XVII p. 667.
1. **Melanconis perniciosa** Briosi et Farneti, Atti R. Ist. bot. Pavia 4600 ser. II, v. XIII (1909) et v. XIV pag. 50, Riv. Patol. Veget. III (1909) p. 341. — Pseudostromatibus sparsis, majusculis, peridermio pustulato tectis, deinde erumpentibus; peritheciis aggregatis, irregulariter sparsis v. subcircinantibus, majusculis, ovatis, in colla convergentia attenuatis; ascis cylindraceis, stipitatis, 150-160 μ . longis; paraphysibus filiformibus, ascis longe superantibus; sporidiis octonis, monostichis, raro distichis, elliptico-oblongis, hyaliniis, medio didymis, parum constrictis, utrinque obtusiusculis, 35-38 \times 15-18.

Hab. in cortice Castaneæ parasitica, morbum « Moria dei

Castagni » v. « Male dell'inchiostro » provocans in Etruria, Liguria, Pedemontio Italæ. — Status conidicus: *Coryneum perniciosum* Br. et Farn.; st. pycnidicus: *Fusicoccum perniciosum* Br. et Farn. — Cfr. de hac specie ejusque formis observationes coll. Griffon et Maublanc in Bull. Soc. Myc. France, XXV (1910).

2. **Melanconis Alni** Tul. — Syll. I, pag. 604 — var. *manca* Rehm, 4601 Ann. Mycol. IX (1906) pag. 479. — A typo differt appendiculis sporarum non conspicuis.

Hab. in ramis Alni glutinosæ, Winterberg in Erzgebirge (WINTER), Alni viridis prope Kühtai, Oetz Tyrolia (REHM).

3. **Melanconis Ribis** (P. Henn. et Plöttn.) Sacc. et Trott., *Mel. ribin-cola* Rehm, Ann. Mycol. IV (1905) p. 479. — Ita vocanda est *Ceriospora Ribis* P. Henn. et Plöttn. — Syll. XVI, p. 534.

Hab. in ramis emortuis Ribis nigri, Wilmersdorfer Wiesen prope Berolinum Germaniæ (SYDOW).

4. **Melanconis helvetica** Rehm, Ann. Mycol. IV (1906) pag. 479. — 4603 Descriptio nulla.

Hab. in ramis emortuis Salicis sp., Gotthard-Pass Helvetiæ (REHM).

CHOROSTATE (Sacc.) Trav., Fl. it. Crypt. II (1906) fasc. I, p. 190.
Chorostate Sacc. (ut subgenus *Diaporthes*) — Syll. I, p. 607, XI p. 702, XVI p. 492.

1. **Chorostate atropuncta** (Peck) Sacc. et Trott., *Diaporthe atropuncta* 4604 Peck, N. Y. St. Mus. Bull. 131 (1909) p. 20. — Peritheciis subvalseis, 3-6 in cæspite v. sparsis, minutis, subglobosis, in cortice nidulantibus, nigris, linea nigra nulla limitatis, ostiolis brevibus, glabris, nigris, epidermide leniter elevata rupta circumdati; ascis oblongis v. subcylindraceis, 100-120 \times 10-12; sporidiis subdistichis, uniseptatis, hyalinis, 25-35 \times 7-8.

Hab. in cortice Tiliæ americanæ, Alcove Albany co. Am. bor. (C. L. SHEAR).

2. **Chorostate sorbicola** (Bref.) Sacc. et Trott., *Diaporthe sorbicola* 4605 Brefeld Unters. Mykol. X (1891) pag. 236, t. VIII, f. 10-11. — Stromatibus valseis, conicis, peridermio tumidulo tectis; peritheciis in quoque stromate copiosis, stipatis, ostiolo nigro erumpentibus; ascis oblongis 100-115 \times 12; sporidiis ellipsoideo-oblongis, utrinque rotundatis, bicellularibus, 4-guttatis medio leviter constrictis, distichis, hyalinis, 23-25 \times 6,5-7,5.

Hab. in ramulis Sorbi Aucupariæ in Germania (FÜCKEL sub *Valsa sorbicola* partim, in herb. NITSCHKE). — Forte eadem species est *D.* (Chor.) *Woroniniae* Jacz. quæ tamen posterior (1896).

3. **Chorostate Sydowiana** Sacc., Annal. Mycol. vol. VI (1908), *Diaporthe* 4606 (Chor.) *Sydowiana* Sacc. Herb. — Stromatibus laxe gregariis, subconicis, pustulatum erumpentibus $1\frac{1}{2}$ mm. diam.; peritheciis in quoque stromate paucis (7-10) saepius circinantibus, globulosis, intus atro-griseis, ostiolis globulosis, parum emergentibus nigris et discum minutum fere totum occupantibus; ascis elongato-fusoideis, basi acutatis subsessilibus, apice rotundatis lumineque bifovealatis, 115-125 \times 16-17, a paraphysatis, octosporis; sporidiis distichis tereti-oblongis, utrinque rotundatis, 28-30 \times 8,3-9, medio 1-septatis, binucleatis, hyalinis.

Hab. in ramis morientibus Sorbi aucupariæ, Birgsau pr. Oberstdorf Bavariæ, Julio 1906 (P. SYDOW).

4. **Chorostate Ailanti** (Sacc.) Trav., *Diaporthe Ailanthe* Sacc. — Syll. 4607 I, p. 621 — var. *megaceraphora* Fairm., Proc. Rochest. Ac. of Sc. IV (1906) p. 220. — Ostiolis emergentibus, valde elongatis.

Hab. in ramis Ailanti, Lyndonville, Amer. bor.

5. **Chorostate Lithrææ** (Speg.) Sacc. et Trott., *Diaporthe Lithrææ* 4608 Speg., Fungi Chilenses (1910) p. 62, cum icono p. 200. — Peritheciis cortice innatis, eximie valsoideo-gregariis, globosis parvis membranaceis, ostiolis cylindraceis, carbonaceis, conniventibus coronatis, 200-250 μ . diam.; ascis subfusoideis a paraphysatis, mox liberis, octosporis, 70-75 \times 10-12; sporidiis subcylindraceis 1-septato-constrictulisi, loculis æquilonis biguttulatis, hyalinis mediocribus, 17-18 \times 4-5.

Hab. in ramis emortuis Lithrææ causticæ, Parque de Lota, Chile Amer. austr.

6. **Chorostate salicella** (Fr.) Sacc. — Syll. I, p. 622 (*Diaporthe*) — 4609 f. **Populi-tremulæ** Feltg., Vorst. Pilz. Fl. Luxemb. IV (1905) p. 86 (*Gnomonia*). — A typo differt ascis sporidiisque minoribus; ascis 46-55 \times 8-10, sporidiis 15-17 \times 3,5-4.

Hab. ad apicem ramulorum Populi tremulæ, Heinrichshof Luxemburgia.

7. **Chorostate ostryigena** (Ell. et Dearn.) Sacc. et Trott., *Diaporthe* 4610 *ostryigena* Ell. et Dearn., Fungi Columb. (1905) n. 2019. — Stromatibus cortice interiore v. ligno innatis, subseriatim dispositis, linea stromatica nigra profunda endoxyla circumscriptis; peritheciis circinatis v. subcircinatis ligno adnatis v. innatis, globoso-conoi-

deis, basi 0,5-0,5 mm. diam.; ostiolis rimose erumpentibus, minute papillatis, 1,4-5 mm. longis; ascis oblongo-fusoideis, octosporis, 40-48 \times 6-8; sporidiis biseriatis, oblongo-cylindraceis, tenuiter nucleatis, 18 \times 3.

Hab. in ramis emortuis *Ostryæ virginianæ*, London, Ontario, Canada (J. DEARNNESS).

8. *Chorostate Vogliniana* Sacc. et Trott., *Diaporthe affinis* Voglino, 4611 Annal. R. Accad. Agric. Torino, LIII, 1910 (1911) p. 341, non *Diap.* (*Chorostate*) *affinis* Sacc. — *Pseudostromatibus numerosis, non gregariis, ambitu circulari v. elliptico, applanatis, 1-1,5 mm. latis, peridermio diu tectis, dein erumpentibus; peritheciis in quoque acervulo plerumque 6-8 circinantibus, globosis v. ovatis 200-400 μ . latis, ostiolis convergentibus, brevibus, non exertis; ascis cylindraceis basi breviter attenuato-subpedicellatis, a paraphysatis, 90-120 \times 10-12, octosporis; sporidiis subdistichis oblongo-fusoideis, constricto-biseptatis, 22-24 \times 5, utrinque obtusis, rectis v. curvulis, 4-guttulatis, hyalinis.*

Hab. in ramis corticatis *Populi canadensis*, Santena Italia bor. — Status pycnidicus: sporulis ellipsoideis v. ovoideis, hyalinis 3 \times 1,5 v. 5-6 \times 1,5. — Ob sporidia 2-septata a typo generis deflectit.

9. *Chorostate libera* (v. Höhn.) Sacc. et Trott., *Diaporthe libera* v. 4612 Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) p. 340, — *Stromatibus sparsis, noduloso-depressis, nigris, primum immersis dein cortice disrupta supra liberis; peritheciis irregulariter rotundatis 450-500 μ . cr., collo destitutis sed ostiolo verruciformi praeditis, 3-5 in quoque stromate; ascis clavato-fusoideis, sessilibus, tenuiter tunicatis, octosporis, 45-50 \times 6-7, a paraphysatis; sporidiis distichis, fusoideis, apice obtusulis, appendicibus destitutis, quadilocularibus, cuboideo-quadriguttulatis, 9-12 \times 2-3.*

Hab. in ramo cuiusdam putri Tjibodas in ins. Java.

DIAPORTHE Nits. — Syll. I p. 606, IX p. 702, XI p. 307, XIV p. 543, XVI p. 492, XVII p. 667 (excl. sect. *Chorostate*).

I. *Euporthe*.

1. *Diaporthe Kriegeriana* Rehm, Ann. Mycol. VI (1908) pag. 321. — 4613 *Stromate late effuso, ramulos ambiente, peridermio relaxato ostiolis perforato tecto, cortice haud decolorato, ligno intus nigro limitato;*

peritheciis primitus tectis, globulosis, ca. 0,2 mm. diam., raro sparsis, plerumque 2-5 arcte congregatis, ligno supremo innatis, in collum elongatis, ostiolis e basi conica cylindraceis, rectis, ca. 0,5 mm. longe prominentibus; ascis fusoideis, 50-55 \approx 9, octosporis; sporidiis fusiformibus, medio septatis, vix constrictis, rectis, utraque cellula 1-2-guttata, 12-14 \approx 4, hyalinis, distichis; paraphysibus filiformibus.

Hab. ad ramulos sicos *Aesculi Hippocastani* prope Königstein a. Elbe Germania (KRIEGER).

2. *Diaporthe zizyphina* Speg., An. Mus. Nac. Buenos Aires t. XIX 4614 (1907) p. 366. — Peritheciis matrice leniter infuscata infossis, eximie rostellato-ostiolatis, globulosis 200-250 μ . diam., ostiolo 0,5-2 mm. longo; ascis e fusoideo clavulatis mox deciduis, a paraphysatis octosporis 45-50 \approx 9-10; sporidiis distichis ellipsoideo-elongatis 13-15 \approx 4-5, medio 1-septatis leniter constrictis, hyalinis, loculis 2-guttulatis infero saepius leniter minore.

Hab. ad pedunculo fructuum *Zizyphi vulgaris* in hortis San Miguel, Buenos Aires Rep. Argentina Amer. austr.

3. *Diaporthe fasciculata* Nits. — Syll. I, pag. 639 — var. *Meliloti* 4615 Sacc. Fung. ital. fig. 1253. — Peritheciis ligno immersis, peridermio atrato tectis, ostiolis cylindraceis emergentibus, peritheciis diametrum æquantibus; ascis fusoideis, typicis 50-54 \approx 8-10, octosporis; sporidiis distichis fusoideis utrinque rotundatis vel obtusulis, medio constricto-1-septatis, 12-15 \approx 3,5-4, rectis, 4-guttatis, hyalinis.

Hab. in caulibus emortuis *Meliloti officinalis*, Montello, Italia super.

4. *Diaporthe Corallodendri* Speg., An. Mus. Nac. Buenos Aires t. XIX 4616 (1909) p. 362. — Peritheciis ligno denudato v. corticato sordide infuscato immersis, vix ostiolato-papillatis 120-130 μ . diam.; ascis e fusoideo subclavatis, mox deciduis, octosporis a paraphysatis, 55-60 \approx 7-8; sporidiis distichis subfusoideis, 14-15 \approx 3,5-4, medio uniseptatis non v. leniter constrictis, grosse 4-guttulatis hyalinis, loculis subæqualibus.

Hab. ad ramos aridos *Corallodendri* (*Erythrina*) cristæ-galli prope La Plata Rep. Argentina America austr.

5. *Diaporthe Baptisiae* Rehm, Ann. Mycol. VI (1908) pag. 353. — 4617 Pseudostromate late expanso, ramulos ambiente, nigro, cum cortice coalito ejusque superficiem tandem nigrificante, primitus peridermio tecto, dein denudato et ligni superficiem atrificante, intus dilutissime nigro-limitato; peritheciis globosis, sparsis, ligni strato

supremo immersis, ca. 0,15 mm. ostiolis prorumpentibus, cylindraceis, tenuissimis, rectis, ca. 0,5 mm. longis; ascis fusoideis, 40-45 \times 6-9, plerumque 4-sporis; sporidiis ellipsoideo-fusiformibus, medio septatis et subconstrictis, utraque cellula biguttata, rectis, hyalinis, 10-12 \times 3,5, distichis; paraphysibus filiformibus, septatis, ca. 3 μ . crassis.

Hab. ad caules *Baptisiae tinctoriae*, Newfield N. Jersey Amer. bor. (ELLIS). — *Affinis Diaporthe Arctii.*

6. **Diaporthe Sphaeralceæ** Speg., An. Mus. Nac. Buenos Aires t. XIX 4618 (1909) p. 365. — Peritheciis ligno infuscato v. corticato immersis sparsis v. rostellato-ostiolatis, subglobosis 150 μ . diam.; ascis e clavulato subfusoideis, 60 \times 8-10, deciduis, octosporis aparaphysatis; sporidiis distichis ellipsoideis 16 \times 5, medio 1-septatis non v. vix constrictis, hyalinis, loculis minute 2-guttulatis, infero saepius non-nihil minore.

Hab. ad ramulos aridos Sphaeralceæ patagonicae in horto La Plata Rep. Argentina Amer. austr.

7. **Diaporthe Verbæ** Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4619 (1908) p. 122. — Peritheciis ramulos adhuc epidermide vestitos, dense minuteque pustulosos reddentibus, ligno immersis 150 μ . diam. sublongiuscule ostiolatis; ascis mox diffluentibus 35-40 \times 8, octosporis, aparaphysatis; sporidiis oblique distichis e cylindraceo ellipsoideis medio uniseptatis, leniter constrictis, utrinque obtusis, grosse 4-guttulatis, hyalinis, 10-11 \times 3-4.

Hab. ad ramos dejectos subputrescentes Ilicis paraguariensis in dumetis Rep. Argentina Amer. austr.

8. **Diaporthe glandulosa** Rehm, Ann. Mycol. VI (1908) p. 321. — 4620 Stromate in ligno decorticato late effuso, idque tenuiter fusco-nigrificante, intus nigro-limitato, tenuissimo; peritheciis plus minusve seriatis, globosis, ligno innatis, 0,5 mm. diam., sparsis, solitariis, ostiolo globuloso nigro subprominente; ascis ellipsoideis, tenerrimis, usque ad 45 \times 8-9, octosporis; sporidiis oblongis, utrinque rotundatis, rectis, medio septatis, haud constrictis, utraque cellula 1-2-guttata, 12 \times 3,5, hyalinis, distichis; paraphysibus filiformibus.

Hab. ad ramos putrescentes Ailanti glandulosæ prope Nossen Saxoniae (KRIEGER). — A *Diaporthe discutiente* omnino diversa et ob paraphyses anceps.

9. **Diaporthe Gilliesiana** Speg., Fungi Chilenses (1910) p. 63. — Pe- 4621 ritheciis ligno cortice vestito immersis, globosis, parvis, ostiolo cy-

lindraceo carbonaceo corticem perforante, sed non exerto, armatis, 150-180 μ . diam.; ascis lanceolatis fluxilibus, octosporis, 50 \approx 8; sporidiis distichis, cylindraceo-subbiconoideis parvis hyalinis, ad septum medium non v. vix constrictis, 14-15 \approx 3,5-4.

Hab. in ramis emoruis Lithraeæ causticæ in silvis prope Cerro Caracol de Concepcion, Chile Amer. austr.

10. **Diaporthe Heveæ** Petch, Ann. Roy. Bot. Gard. Peradenya III, 4622 Pt. I (1906) p. 3. — Peritheciis discretis, nigris 0,5-1 mm. diam., circinantibus, in ligno nidulantibus, in collum circa 1 mm. diam., 0,5 mm. long., parum e cortice emergens, attenuatis; ascis anguste ovatis, octosporis 40-45 \approx 6-8; sporidiis oblique monostichis, hyalinis, fusoideis, uniseptatis, 10-13 \approx 4.

Hab. in ramis Heveæ brasiliensis, Ceylon.

11. **Diaporthe Menispermi** Speg., An. Mus. Nac. Auenos Aires t. XIX 4623 (1909) p. 363. — Peritheciis ligno immersis, ostiolo rostellato corticem perforante non v. vix exerto armatis, globosis 180-200 μ . diam.; ascis subfusoideis deciduis octosporis, apophysatis, 50-55 \approx 7; sporidiis elongato-ellipsoideis non v. vix inaequilateralibus, medio 1-septato-constrictulis, 14-15 \approx 4-4,5, grosse 4-guttulatis hyalinis, loculis subæqualibus.

Hab. vulgata ad ramulos aridos Menispermi laurifolii in hortis, La Plata Rep. Argentina Amer. austr.

12. **Diaporthe Elæagni** Rehm — Syll. XIV, p. 546 — var. *americana* 4624 Fairm., Ann. Mycol. VIII (1910) p. 332. — Peritheciis immersis dein ostiolo prominentibus; ascis clavato-cylindraceis, utrinque attenuatis, 45-55 \approx 6-7; sporidiis oblongo-fusoideis; uniseptatis, septo constrictis, 4-nucleatis, hyalinis, 13-17 \approx 3-4.

Hab. in ramis dejectis Elæagni longipedis culti, Lyndonville Amer. bor.

13. **Diaporthe Cestri** Speg., An. Mus. Nac. Buenos Aires t. XIX 4625 (1909) p. 361. — Peritheciis matrice corticata v. decorticata lateque infuscata infossis, globulosis 90-120 μ . diam., ostiolo minuto rostellato armatis; ascis e fusoideo subclavulatis, 55-60 \approx 7-8, deciduis octosporis apophysatis; sporidiis distichis e cylindraceo-subfusoideis 12-13 \approx 3-4, medio 1-septatis non v. vix constrictis, grosse 4-guttulatis, loculis æqualibus.

Hab. ad ramos aridos putrescentes Cestri Parqui in sepiibus prope Villa Casilda Rep. Argentina America austr.

14. **Diaporthe Solani-verbascifolii** Speg., An. Mus. Nac. Buenos Aires 4626 t. XIX (1909) pag. 364. — Peritheciis ligno immersis, plagulas

intus subdealbatus extus nigrefuctos sæpius corticatus incolentibus, subglobosis 100-200 μ . diam., superne prominulis subrostellatis; ascis subfusoideis deciduis octosporis aparaphysatis 40-60 \approx 8-12; sporidiis ellipsoideis 14-16 \approx 3-6, medio 1-septatis, grosse 4-guttulatis hyalinis, loculis æqualibus v. infero vix minore.

Hab. ad ramulos aridos Solani verbascifolii in hortis La Plata, Rep. Argentina Amer. austr.

15. *Diaporthe cornicola* Ell. et Ev. — Syll. XIV, pag. 546 — var. 4627 *acuta* Starb., Ascom. Schw. Chaco-Cordill. Exp., Arkiv. f. Bot. Bd. V (1905) p. 25. — Peritheciis minoribus, 200 μ . diam., ostiolis cylindraceis, acutiusculis peridermum perforantibus, partibus internis minoribus a typo differt; ascis 38-40 \approx 6,5-7,5; sporidiis 9-11,5 \approx 3-4.

Hab. in ramis siccis Crotonis, Gran Chaco, Tatareda, Bolivia.

16. *Diaporthe Ricini* Spegazz., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 364. — Peritheciis ligno extus nigrefacto intus subimmutato, omnino infossis, inermibus, globulosis, 100-150 μ . diam.; ascis subfusoideis, cito deciduis subdiffluentibus, octosporis aparaphysatis 50 \approx 8-9; sporidiis distichis ellipsoideo-subfusoideis, medio 1-septatis leniter constrictulis, 14-15 \approx 5, grosse 4-guttulatis, hyalinis, loculis æqualibus.

Hab. ad ramos emortuos subputrescentes Ricini communis in sepibus prope La Plata Rep. Argentina Amer. austr.

17. *Diaporthe asterisciina* Speg., Fungi Chilenses (1910) p. 63, cum 4629 icono, p. 200. — Peritheciis ligno denudato extus nigrefacto immersis, globulosis, minutis, membranaceis, ostiolo carbonaceo parum exerto armatis, 90-110 μ . diam.; ascis subfusoideis mox liberis aparaphysatis, 50 \approx 10; sporidiis subcylindraceis parvis, hyalinis 1-septato-constrictulis, 12-13 \approx 4-4,5.

Hab. in pedunculis siccis Asterisci (Dipterygiæ) chilensis, Cerro Caracol de Concepcion, Chile Amer. austr.

18. *Diaporthe aberrans* Speg., Fungi Chilenses (1910) p. 62. — Pe- 4630 ritheciis ligno denudato non vel vix infuscato omnino immersis, globosis minutis membranaceis, ostiolo carbonaceo vix exerto coronatis, 100-120 μ . diam.; ascis subcylindraceis breviter crasseque pedicellatis, octosporis, 65-70 \approx 10-12; sporidiis distichis subcylindraceis subparvis ad medium 1-septato-constrictulis hyalinis, loculis æquilogis, biguttulatis, obtusis, 14-15 \approx 4-5.

Hab. in pedunculis emortuis Lobeliæ salicifoliæ, Cerro

Alegre de Valparaiso, Chile, Amer. austr. — Forma ascorum a gen. *Diaporthe* recedit.

19. **Diaporthe microplaca** Sacc., in Ann. Mycol. X (1912) p. 316. — 4631

Stromatibus initio epidermide velatis, maculiformibus, nigris, acute limitatis, oblongis v. sublobatis, minutis, 3-4 mm. longis, lignum penetrantibus lineaque atra sæpe cinctis; peritheciis stromate innatis globulosis, exiguis, 250-300 μ . diam., ostiolis punctiformibus, nunquam emergentibus; ascis fusoideis, a paraphysatis, apice bifoveolatis, 30-35 \times 7, octosporis; sporidiis distichis, fusiformibus. obsolete 1-septatis, rectiusculis, 10-12 \times 3, hyalinis.

Hab. in peridermio lignoque supposito Lonicerae semper-virentis in Horto Botanico patavino, 1897 (D. SACCARDO). — Species e subgenere *Euporthe*, cum *Diap. cryptica* nil commune habet.

20. **Diaporthe Tupæ** Speg., Fungi Chilenses (1910) p. 64. — Peritheciis ligno denudato infossis, gregariis, clypeo stromatico determinato aterrimo tectis, globulosis, minutis, 90-100 μ . diam., breviter papillato-ostiolatis; ascis fluxilibus subfusoideis, a paraphysatis, octosporis, 50-55 \times 10-12; sporidiis biconoideis, hyalinis, parvis, constrictis, guttulatis, 12-14 \times 4. — 4632

Hab. in pedunculis siccis Lobeliae Tupæ in silvis prope Ciudad de Valdivia, Chile Amer. austr.

21. **Diaporthe orthoceras** (Fr.) Nits. — Syll. I, p. 651 — var. deci- 4633

dua Starb., Ascom. Schwed. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 26. — Stromatibus obsolete, linea nigra significatis, ellipticis vel oblongatis vel nonnumquam longe et angustissime seriatis, 1-nonna nullula perithecia includentibus; peritheciis cortice immersis, basi ligno insculptis, ostiolo cylindrico, interdum longiuscule exerto, sæpiissime abrupte deciduo erumpentibus, c. 200 μ . diam., textura membranacea; ascis late fusiformibus v. clavatis, utrinque acutiusculis, 32-38 \times 6-7,5; sporidiis octonis, distichis vel congregobatis vel inferioribus monostichis, fusoideis quadriguttulatis, deinde medio septatis, 8-10 \times 2,5-4; paraphysibus nullis.

Hab. in caulinis aridis lianæ Compositarum spec. (*liana*), Gran Chaco, Tatarenda Bolivia. — A typo differt matrice non nigricata, peritheciis basi tantum ligno infossis, sporidiis minoribus.

22. **Diaporthe Xanthii** Speg., An. Mus. Nac. Buenos Aires t. XIX 4634

(1909) p. 366. — Matrice late atrata, peritheciis infossis densiu-

scule gregariis, minutis vix rostellato-ostiolatis, 160-180 μ . diam. (sic); ascis fusoideis mox deciduis aparaphysatis, octosporis, 50-60 \times 8-9; sporidiis e fusoideo subcylindraceis utrinque acutiuscule subrotundatis 14-16 \times 4, rectis v. lenissime subcurvulis, medio 1-septatis non v. vix constrictis, hyalinis, loculis æqualibus subgrosse biguttulatis.

Hab. ad caules aridos putrescentes *Xanthii spinosi* prope La Plata, Argentina Amer. austr.

23. *Diaporthe Tageteos* Speg., An. Mus. Nac. Buenos Aires t. XIX 4635 (1909) p. 365. — Peritheciis hinc inde laxe gregariis, matrice sordide infuscata immersis vix rostellato-ostiolatis, globulosis 90-100 μ . diam.; ascis e fusoideo clavulatis 50-55 \times 7-9 mox deciduis, aparaphysatis, octosporis; sporidiis distichis e subcylindraceo fusoideis, 14-16 \times 4, medio 1-septatis leniter constrictis hyalinis, loculis æqualibus grosse biguttulatis.

Hab. ad caules aridos putrescentes *Tageteos* minutæ in pratis circa Villa Casilda, Rep. Argentina Amer. austr.

24. *Diaporthe Centrophylli* Speg., An. Mus. Nac. Buenos Aires t. XIX 4636 (1909) p. 362. — Peritheciis ligno vestito v. denudato semperque infuscato infossis v. ostiolato-papillatis, globulosis, 150-180 μ . diam.; ascis subfusoideis deciduis octosporis, aparaphysatis, 50-60 \times 8-10; sporidiis distichis e cylindraceo fusoideis rectis v. leniter inæquilateralibus 15-16 \times 3.5-4, medio 1-septatis non v. vix constrictis, grosse 4-guttulatis hyalinis, loculis æqualibus.

Hab. ad basim caulinum *Centrophylli lanati* in arvis circa La Plata Rep. Argentina America austr.

25. *Diaporthe Amaranti* Speg., An. Mus. Nac. Buenos Aires t. XIX 4637 (1909) p. 360. — Matrice hinc inde extus late sordideque infuscata; peritheciis in maculis gregariis, relaxatis v. confertis, matrice infossis, globulosis, 120-150 μ . diam., sursum prominulis atque ostiolo carbonaceo saepius breviusculo armatis; ascis fusoideis 45-50 \times 8, aparaphysatis, octosporis; sporidiis distichis ellipoideis medio 1-septato-constrictis, loculis subæqualibus, hyalinis grosse biguttulatis, 10-12 \times 4.

Hab. ad caules putrescentes *Amaranti chlorostachydis* in arvis Villa Casilda Rep. Argentina Amer. austr.

26. *Diaporthe catamarcensis* Spegazz., An. Mus. Nac. Buenos Aires 4638 t. XIX (1909) pag. 361. — Peritheciis ligno corticato immersis, ostiolo longiusculo exerto ornatis, globosis 120 150 μ . diam.; ascis fusoideis, mox deciduis, aparaphysatis, octosporis 40-45 \times 7-8; spori-

diis distichis ellipsoideo-fusoideis, 12-15 \times 3-4, medio 1-septato-constrictis grosse 4-guttulatis, hyalinis, loculis æqualibus.

Hab. ad ramulos aridos *Salicis chilensis* var. *pyramidalis* in Catamarca Rep. Argentina Amer. austr.

27. **Diaporthe Macluræ** Speg., An. Mus. Nac. Buenos Aires t. XIX 4689 (1909) p. 362. — Peritheciis ligno insculptis sed superne cortice obtegente adnatis, minute papillato-ostiolatis, globulosis, 120-150 μ . diam.; ascis e fusoideo subclavulatis, deciduis, octosporis apophysatis, 50-60 \times 7-10; sporidiis distichis, ellipsoideis, medio 1-septatis plus minusve constrictis, 12-16 \times 4-6, grosse 4-guttulatis, hyalinis, loculis subæqualibus.

Hab. ad ramos putrescentes *Macluræ aurantiacæ* in se-pibus prov. Buenos Aires, Rep. Argentina Amer. austr.

28. **Diaporthe Casuarinæ** Speg., An. Mus. Nac. Buenos Aires t. XIX 4640 (1909) p. 361. — Peritheciis ligno extus infuscato intus pallescente sparse immersis, globulosis 100-120 μ . diam.; ascis e fusoideo subclavulatis 50-60 \times 10-22 cito deciduis, apophysatis octosporis 50-60 \times 10-12; sporidiis ellipsoideis, 12 \times 6, medio 1-septato-constrictis, loculis subæqualibus grosse 1-2-guttulatis hyalinis.

Hab. ad ramulos emortuos aridos *Casuarinæ strictæ* in horto Claypole, Buenos Aires Rep. Argentina Amer. austr.

29. **Diaporthe chamæropina** L. Gaja, Fl. micol. prov. Padova, p. 19 4641 (sunto lit.). — Stromate linea nigricante limitato; peritheciis solitariis, raro proximatis, immersis, subglobosis, atris, 220-240 μ . latis, collo oblongo cylindraceo obtuso et inæquali erumpentibus, ascis cylindraceis-fusoideis, octosporis, apophysatis, 62-66 \times 6-8; sporidiis uniseptatis, hyalinis, medio constrictis, 4-guttulatis, oblique monostichis, saepe ad apicem acutiusculis, 12-14 \times 5-6.

Hab. in petioliis *Chamæropis humilis* in Viridario Convictus Universitariorum « Francesco Petrarca » Patavii Ital. bor.

— Affinis est *Diaporthe Phœnicis*, a qua differt substrato, collo peritheciorum longiore, sporidiis crassioribus, et medio constrictis.

30. **Diaporthe Musæ** Spegazz., An. Mus. Nac. Buenos Aires t. XIX 4642 (1909) p. 363. — Matrice extus plus minusve late vagueve infuscata, intus immutata; peritheciis parenchymate petiolorum im-mersis, minutis globosis, majuscule rostellatis, quandoque inermibus, nigris, 150 μ . diam.; ascis e fusoideo subclavulatis, deciduis octosporis apophysatis, 40-58 \times 8-10; sporidiis distichis rectis vel lenissime inæquilateralibus, medio 1-septato-constrictis, 10-13 \times 5-6, grosse 4-guttulatis hyalinis, loculis subæqualibus.

Hab. ad petiolas putrescentes foliorum Musæ sapientum in hortis prope Oran Jujuy Amer. austr.

31. *Diaporthe ?Tillandsiæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4643 (1909) p. 365. — Peritheciis parenchymate infossis parvis, ostiolis rostellatis carbonaceis armatis, globulosis 200-226 μ . diam.; ascis cylindraceis non deciduis nec diffluentibus, aparaphysatis 180-200 \times 15-16; sporidiis monostichis, rectis, ellipsoideis, 20 \times 12, medio 1-septatis hyalinis, loculis æqualibus subglobosis eguttulatis.

Hab. ad folia arida putrescentia Tillandsiæ Duratii in hortis La Plata, Rep. Argentina Amer. austr. — Habitu externo typico sed ascis cylindraceis non caducis sporarumque loculis subglobosis eguttulatis desciscens.

32. *Diaporthe Sacchari* Speg., An. Mus. Nac. Buenos Aires t. XIX 4644 (1909) p. 364. — Matrice immutata v. vix vage pallideque infuscata; peritheciis lenticularibus hinc inde laxe gregariis insculpto-prominulis brevissime rostellatis, 120-150 μ . diam.; ascis e fusoideo subclavulatis, octosporis, aparaphysatis, 65-90 \times 14-18; sporidiis subfusoideis distichis saepius leniter subcurvulis, 20-30 \times 5-7, medio 1-septatis non v. vix constrictis, loculis subæqualibus grosse 1-guttulatis hyalinis.

Hab. ad culmos crescentes Sacchari officinarum in campis prope Ledesma, Jujuy Rep. Argentina, Amer. austr.

II. *Tetrastaga.*

33. *Diaporthe Anonæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4645 (1909) p. 360. — Matrice immutata; peritheciis cortice dealbato omnino immersis e globoso depressis, membranaceis, olivaceis, 120-160, ostiolo vix papillato exertoque coronatis; ascis fusoideis mox deciduis, aparaphysatis, octosporis, 45-50 \times 8; sporidiis distichis e cylindraceo subfusoideis, 12-13 \times 3, medio 1-septatis, non vel vi constrictis, grosse 4-guttulatis, loculis æqualibus.

Hab. ad ramulos aridos Anonæ Cherimoliæ in hortis Tucuman Rep. Argentina Amer. austr.

34. *Diaporthe valparadisiensis* Speg., Fungi Chilenses (1910) p. 64. — 4646 Peritheciis hinc inde parce gregariis v. sparsis, cortice subimmunita immersis, subglobosis, minutis, vix papillato-ostiolatis 180-200 μ . diam.; ascis non fluxilibus e fusoideo-subclavulatis, breviter pedicellatis, aparaphysatis, 70 \times 8, octosporis; sporidiis subcylindra-

ceis v. leniter subbiconoideis utrinque obtusis, medio 1-septato-constrictis hyalinis, 14-15 \times 4, grosse guttulatis.

Hab. in ramis siccis Lithrææ causticæ, Cerro Alegre de Valparaíso, Chile Amer. austr. — Ob structuram ascorum a genere parum recedit.

35. **Diaporthe Mate** Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4647 (1908) pag. 122. — Peritheciis cortice innatis epidermide velatis 150-200 μ . diam., sparsis v. laxe gregariis, albo-faretis, ostiolo minute carbonaceo coronatis; ascis fusoideo-clavulatis, aparaphysatis, octosporis, 75-80 \times 15-20; sporidiis oblique distichis subbiconoideis, medio uni-septato-constrictis, 20-22 \times 7, loculis saepius grosse 1-v. 2-guttulatis, hyalinis.

Hab. ad ramos aridos adhuc pendulos Ilicis paraguariensis, in silvis circa Campo das Cuias Rep. Argentinae Amer. austr. *D. binoculatae* (Ell.) Sacc. affinis, sporidiis duplo angustioribus distincta.

36. **Diaporthe Abutilonis** Speg., An. Mus. Nac. Buenos Aires t. XIX 4648 (1909) p. 366. — Peritheciis cortice infuscato infossis, densiuscule gregariis, globosis 100-120 μ . diam. ostiolo non v. vix papillato, matricis superficem attingente, coronatis; ascis e fusoideo subclavulatis citissime deciduis, 45-50 \times 7-8, octosporis, aparaphysatis; sporidiis distichis e cylindraceo subfusoideis, 12-14 \times 3-4, medio 1-septatis non v. lenissime constrictis hyalinis, loculis subæqualibus biguttulatis.

Hab. ad ramos aridos putrescentes Abutilonis sordidi in silva Santa Catalina prope Buenos Aires Rep. Argentina Amer. austr.

37. **Diaporthe Nerii** Spegazz., An. Mus. Nac. Buenos Aires t. XIX 4649 (1909) p. 366. — Peritheciis matrice late nigrefacta infossis, globulosis, 140-150 μ . diam., membranaceis vix papillulato-ostiolatis; ascis e fusoideo subclavulatis, 50-55 \times 8-10, cito secedentibus, octosporis, aparaphysatis; sporidiis subelongato-ellipsoideis 14-15 \times 4-5, medio 1-septato-constrictulis, hyalinis, loculis æqualibus biguttulatis.

Hab. ad ramulos emortuos putrescentes Nerii Oleandri in hortis La Plata Rep. Argentina Amer. austr.

38. **Diaporthe Polygoni** Rehm, Ann. Mycol. VI (1908) pag. 321. — 4650 Stromate late effuso, caulem ambiente, demum extus nigricante, intus linea nigra vix conspicua limitata; peritheciis dispersis, seriatim in cortice immutato nidulantibus eumque protrudentibus, globosis, 0,15 mm. diam., demum collabescientibus, ostiolo tenuis-

simo cylindraceo recto peridermum perforantibus et usque ad 0,5 mm. prominentibus; ascis ellipticis, 35-45 \times 9-10, octosporis; sporidiis oblongis, obtusis, rectis, bicellularibus, medio constrictis, utraque cellula guttis 2 magnis oleosis repleta, demum 3-septatis, hyalinis, 7-10 \times 2,5-3 distichis; paraphysibus nullis.

Hab. ad caules sicclos *Polygoni avicularis*, Lichtenfelde pr. Berolinum Germaniae (Sydow).

39. *Diaporthe immaculata* Rehm, in Jaap, Abh. bot. Ver. Prov. Bran- 4651 denb. LII (1910) p. 148. — Nomen nudum.

Hab. in caulis vetustis *Rumicis crispi* prope Triglitz, Germania.

40. *Diaporthe prenanthicola* Atkins. in Rehm, Ann. Myc. VII (1909) 4652 p. 531. — Nomen nudum.

Hab. in ramis emortuis *Prenanthidis*, Altissima Cascatilla Ithaca Amer. bor. (G. F. ATKINSON).

PSEUDODIAPORTHE Spegazz., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 358 (Etym. *pseudes* falsus et *Diaporthe*). — Perithecia matrice immersa, stromate genuino destituta. Asci pedicellati non decidui, paraphysati; sporidia didyma hyalina. — Genus ascis strato proligerò adnatis et paraphysatis a *Diaporthe* optime distinctum.

1. **Pseudodiaporthe Coffeæ** Speg., l. c. p. 358 cum icon. — Peritheciis corticolis v. lignicolis, globulosis, 200-300 μ . diam., rostellato-ostiolatis, laxissime pauci-gregariis; ascis e fusoideo clavulatis breviter pedicellatis, 110-150 \times 18-20, paraphysibus filiformibus longioribus densiusculis obvallatis; sporidiis biconoideis di- v. tristichis, medio 1-septatis, leniter constrictis, loculis æqualibus grosse biguttulatis.

Hab. ad ramos emortuos Coffeæ arabicæ in hortis Orán, Jujuy Rep. Argentina, Amer. austr.

2. **Pseudodiaporthe major** Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 359. — Peritheciis 500-800 μ . diam.; ascis e cylindraceo-subclavulatis, sèpius torulosis, 120-140 \times 20-24; sporidiis ellipsoideo-didymis, 30-34 \times 12-14.

Hab. ad ramos emortuos Coffeæ libericæ in hortis Orán, Jujuy, Rep. Argentina Amer. austr. — Species a precedente notis nonnullis vix recedens et facile ejusdem varietatem majorem sistens sed formæ intermediae adhuc non inventæ.

STIGMATOPSIS Trav., Fl. ital. cryptog. II, fasc. I (1906) pag. 213
 (Etym. a *stigma* et *opsis* facies, quia *Diatrypem Sigma* habitu omnino imitatur). — Stroma genuinum, effusum, erumpenti-superficiale, ligneo-carbonaceum, fragile, extus intusque nigricans. Perithecia monosticha, stromate immersa, globoso-ovoidea v. angulata, atra; asci clavato-oblongi, pedicellati, paraphysati, octospori; sporidia ellipsoideo-oblonga, 1-septata, hyalina v. dilute fuscidula, guttulata. — Est *Diatrype* sporidiis hyalo-didymis.

1. **Stigmatopsis Baccarinii** Trav., l. c. p. 214, fig. 39. — Stromate 4655 effuso, longe expanso, subcarbonaceo, nigricante, ostiolis prominulis punctulato; peritheciis immersis monostichis, stipatis, globoso-ovoideis, $\frac{1}{3}$ - $\frac{1}{2}$ mm. diam., mutua pressione saepe angulatis, in collum brevissimum productis, nigris; ostiolis prominulis poro circulari v. eroso pertusis; ascis clavato-fusoideis, longiuscule pedicellatis, 75-100 \times 8-11 (p. sp. 55-70 μ . longa) paraphysibus filiformibus paucis obvallatis; sporidiis irregulariter distichis, initio suballantoideis, dein ellipsoideo-oblongis, rectis v. curvulis, 1-septatis, ad septum parum constrictis, quadriguttulatis, in asco lueto-fuscidulis, extus subhyalinis, 15-20 \times 5-6.

Hab. in ramis corticatis Fagi, Vallombrosa Etruriæ, Italia centr. (BACCARINI).

MYRMÆCIUM (Nits.) Sacc. — Syll. I p. 600, XIV p. 492, XVII p. 675.

1. **Myrmæcium Höhnelianum** (Rick) Sacc. et Trav. — Syll. XX p. 1275 4656
Myrmæciella Höhniana Rick in Theissen Annal. Mycol. (1910) p. 456 c. fig. — Subepidermicum, erumpens; stromate flavo-rubello, ætate atro-sanguineo, suberoso, e cellulis polygonalibus membranis crassis formato; peritheciis stipatis, ellipsoideis vel subglobosis, raro solitariis, plerumque in pulvinulos globosos c. 1,2-1,5 \times 0,8-1 mm. aggregatis, partim stromate communi immersis, partim subliberis, vertice nudo vitreo-sanguineo, c. 420-500 \times 240-340, poro minuto, orbiculari, interdum e latere compresso lophiostomataceo pertusis; ascis sessilibus vel brevissime nodulose stipitatis, elongatis, 118-135 \times 20-25 v. brevioribus subventricosis, 95 \times 28-30, octosporis; sporidiis distichis, hyalinis, oblongis, leniter convexo-concavis, medio septatis, raro subconstrictis, irregulariter guttulatis, 35-44 \times 11-13; paraphysibus nullis.

Hab. in ramis Rubi sp. in Brasilia. — Species quoad sedem systematicam dubia.

2. *Myrmæcium Harperianum* Rehm, Ann. Mycol. VII (1909) p. 532. 4657
 — Stromatibus in ramulo gregariis, lenticularibus, convexulis, innatis, singularibus, interdum binis confluentibus, extus cinereo-nigris v. atris, 3-4 mm. diam., lignum dealbatum linea tenui nigra, usque ad 5 mm. profunde et 1,5 cm. late ambientibus; peritheciis globosis 3-6 ligno monostiche innatis, 0,5-0,8 mm. diam., membranaceis, fusco-contextis, collis convergentibus, in superficie stromatis denigrati saepe peridermii squamulis obtectis, papillulis conicis obtusis prominentibus; ascis cylindraceis 120-136 x 10-12, octosporis; sporidiis oblongis, utrinque rotundatis, medio septatis et valde constrictis, hyalinis, 15-18 x 7-8, strato mucoso 2 μ. lato obductis, monostichis; paraphysibus filiformibus, septatis, 3 μ. cr., hyalinis.

Hab. ad ramum Corni, Summer Wash. Amer. bor. (ex Herb. E. T. et S. A. HARPER). — *M. endoleuco* affine sed distinctum.

ENDOTHIA Fr. — Syll. I p. 601, IX p. 700, XIV p. 550, XVII p. 675.

1. *Endothia gyroza* (Schw.) Fr. — Syll. I, pag. 601 — Huc juxta 4658 exempl. originalia et observante quoque cl. von Höhnel (Fragm. zur Mykol. IX (1909) p. 20) spectat *Diaporthe parasitica* Murr. (Torreya VI, pag. 189) seu *Valsonectria parasitica* Rehm (Ann. Mycol. (1907) p. 210), valde noxia Castaneis et vere parasitica in Amer. boreali et cuius st. pycnid. (frequentior) est *Endothiella gyroza* Sacc. Cfr. Syll. XXII. De his fungillis cfr. observationes biologicas cl. Henr. Pantanelli (Rendic. R. Accad. Linc. 1911), qui tamen infauste habuit ut *Diaporthe parasitica*!

Sect. 5. Phæodidymæ.

VALSARIA De Not. et Ces. — Syll. I p. 741, IX p. 755, XI p. 818, XIV p. 560, XVI p. 509, XVII p. 691.

1. *Valsaria Milletiae* (Racib.) Sacc. et Trott, *Myrmæcium Milletiae* 4659 Raciborski, Bull. Ac. Sc. Cracovie (1909) pag. 391. — Maculis foliicolis rotundatis primum viridi-flavis dein flavis, 0,5-1 cm. latit; stromate immerso 50 μ. circ. cr. et 1-5 mm. lato; peritheciis in quoque stromate numerosis et epidermidem matrix verruciformi-elevantibus demum ostiolo papilliformi depresso brunneo-flavo ex ea erumpentibus; peritheciis subglobosis v. sublenticularibus, 100-

190 μ . altis, 200-260 μ . latis, papillis ostiolaribus stroma radiatim findentibus; ascis a paraphysatis, allantoideis, 38-44 \times 9-12, octosporis; sporidiis distichis, bilocularibus, levibus, ovoideis 7-9 \times 3-4, utrinque rotundatis non constrictis, nigro-brunneis.

Hab. in foliis Milletiae sericeæ, Diasinga prope Buitenzorg in ins. Java.

2. **Valsaria acericola** Fairm., The Pyren. of Orleans County in Proc. 4660 Rochest. Acad. IV (1905) p. 189. — Stromate corticali, valsoideo, 2 mm. circ. diam.; peritheciis circinatis, parvis, 0,5 mm., cortice interiore infossis et linea nulla stromatica circumscriptis, ostiolis convergentibus et apice in discum nigrum minutum prominulum unitis et pustulas subconicas erumpentes epidermide cinctas efficien- tibus; ascis cylindraceis, p. sp. 250 \times 15-18; paraphysibus?; sporidiis uniseriatis, oblongo-ellipsoideis, brunneis, uniseptatis, septo- constrictis, apice rotundatis, 33-40 \times 15-18.

Hab. ad trunco Aceris rubri, Ridgeway, New York, Amer. bor. (FAIRMAN).

3. **Valsaria clavatiasca** Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4661 (1908) p. 123, cum icon. — Peritheciis saepius laxe gregariis cor- tice innatis, epidermide arcte adnata vestitis, lenticularibus 400-750 μ . diam., carbonaceis, ostiolo vix papillulato ornatis; ascis constipatis clavulato-cylindraceis a paraphysatis, cuneato-pedicellatis long. tot. 150 μ ., p. sp. 120 \times 28; sporidiis ellipsoideo-subbiconoi- deis, medio 1-septatis, non v. vix constrictis, primo tunica tenuis- sima mucosa hyalina vestitis dein nudis, levibus, fuligineis, 30-35 \times 14-15.

Hab. vulgata ad ramos emortuos corticatos Ilicis paragua- riensis Rep. Argentina Amer. austr. — Potius *Phaeospermatis* sp.

4. **Valsaria Mata** Roll. Bull. Soc. Mycol. (1905) p. 24, t. I, f. 1. — 4662 Stromate valseo, nigro, corticali; peritheciis in quoque acervulo 8-10, globosis, stipatis, 0,3-0,5 mm. diam., collis in discum cru- ciatim impressum cuticula cinctum convergentibus; ascis cylindra- ceis, breviter stipitatis, 150 \times 10 filiformi-paraphysatis, octosporis; sporidiis monostichis oblongatis, utrinque rotundatis, 1-septatis, medio constrictis, guttulatis, chlorinis dein pallide brunneis, demum atris, 20-24 \times 8-10.

Hab. in ligno Pistaciæ Lentisci (vulgo Mata) pr. Palma in insul. Balearibus. — Affinis *Vals. insitivæ*.

5. **Valsaria Spartii** Maubl. Bull. Soc. Mycol. (1905) pag. 88, tab. VI, 4663 f. 11. — *Euvalsaria*; stromatibus nigris, carbonaceis, erumpenti-

bus, verrucosis, 1-4 mm. latis; peritheciis inordinate immersis v. irregulariter circinantibus, difformibus, globulosisve; ascis cylindricis, breviter stipitatis, 150-170 \times 10-12, octosporis, paraphysibus filiformibus guttulatis, 2 μ . cr. obvallatis; sporidiis monostichis, primum lutescentibus guttatisque deiu fuligineis, 1-septatis, constrictis, saepe inaequilateris, nunc utrinque rotundatis, nunc basi tenuatis, 18-22 \times 8-10.

Hab. in ramis Spartii juncei, Pornic Loire inf. Galliae. — In stromate juniore occurunt interdum pycnidia sporulis ovoides, hyalinis 2,5 \times 2, sporophoris acicularibus 20 μ . longis suffultis.

6. *Valsaria insitiva* Ces. et De Not. — Syll. I, p. 741. — f. *Acaciae* 4664
cavenniae Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 373.
— Ascis cylindraceis 70-80 \times 10, apapophysatis; sporidiis ellipsoideo-biconoideis 14-15 \times 8 non v. vix constrictis. — f. *Cordiae Gerascanthi* Speg., l. c. — Ascis cylindraceis 90-100 \times 10, dense parophysatis; sporidiis ex elliptico subovoideis 14-16 \times 7-8, loculis subæqualibus v. infero saepius vix minore. — f. *Mimosæ polycarpæ* Speg., l. c. — Ascis cylindraceis breviuscule pedicellatis, 120 \times 10 modice parophysatis; sporidiis ellipsoideis utrinque obtusissimis 14-15 \times 7-10 non v. vix subcoarctatis.

Hab. vulgata ad ramos aridos putrescentesque matricum indi-catarum, Argentina America austr.

7. *Valsaria Theisseni* Rehm, Ann. Mycol. VII (1909) pag. 537. — 4665
Stromatibus irregulariter orbicularibus, 0,5-1,5 cm. diam., 1 mm. cr., atris, cortici innatis, convexulis, ligno linea tenui nigra subtus percurso, glabris; peritheciis globulosis, haud papillulatis, poro pertusis, arcte congregatis, stromate innatis, 0,15 mm. diam., carbonaceis; ascis cylindraceis, apice rotundatis, octosporis 70 \times 6; sporidiis ellipsoideis, utrinque subobtusis, medio septatis et aliquantulum constrictis, utraque cellula 1-guttata, fuscis, 9-10 \times 4, monostichis; paraphysibus filiformibus, 1 μ . cr.

Hab. in ramo emortuo, Sao Leopoldo Rio Grando do Sul Brasilie (THEISSEN S. J.).

8. *Valsaria chilensis* Speg., Fungi Chilenses (1910) p. 68, cum icon. 4666
— Euvalsaria; stromatibus parum prominulis, ligno impositis, epidermide velatis, nigris, scrupulosis, confluendo difformibus; peritheciis stromate constipatis, subglobosis, subcarbonaceis, vix papillato-ostiolatis, 150-200 μ . diam.; ascis cylindraceis non v. vix parophysatis, breviter pedicellatis, 2-4-sporis, 75-80 \times 9-10; spori-

diis recte monostichis subcylindraceis submajusculis, medio 1-septato-constrictulis, intense fuligineis, 20-28 \times 7-8.

Hab. in culmis emortuis Chusqueæ Quila, Cerro Caracol de Concepcion, Chile Amer. austr.

9. *Valsaria ? donacicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 4667 (1909) p. 372. — Stromatibus minutis linearibus, 1-50 mm. long., 250-400 μ . lat., innato-erumpentibus, carbonaceis, matricem plus minusve late sordideque nigrificantibus; peritheciis confertis, subglobosis 90-100 μ . diam., subcarbonaceis obsolete ostiolatis; ascis cylindraceis breviter pedicellatis paraphysatis, octosporis, 70 \times 4; sporidiis recte monostichis ellipsoideis 8 \times 3,5 fuligineis, medio 1-septatis leniter constrictis, loculis subæqualibus v. infero nonnihil minore, non v. 1-guttulatis.

Hab. ad culmos dejectos putrescentes Arundinis Donacis in horto Santa Catalina, prope Buenos Aires Rep. Argentina Amer. austr. — *Vals. insitiva* Ces. et De Not. simillima sed omnibus partibus duplo minoribus mox dignoscenda.

10. *Valsaria subtropica* Speg., An. Mus. Nac. Buenos Aires t. XIX 4668 (1909) p. 372. — Peritheciis cortice innato-erumpentibus, sparsis v. stromatice aggregatis, submolliusculis, atris, subglobosis, 150-200 μ . diam., ostiolo minute papillulato carbonaceo non vel vix prominulo coronatis; ascis clavulatis, longissime pedicellatis, modice paraphysatis, octosporis parte spor. 45-60 \times 10-12, pedicello filiformi 80-120 \times 1,5-2; sporidiis didymis elongato-ellipsoideis, rectis v. vix subnavicularibus, medio 1-septatis leniter constrictis, subopacis fuligineis, 14-16 \times 5-6, loculis æquilogis per grosse biguttulatis.

Hab. ad culmos putrescentes Sacchari officinarum nec non ad caules aridos Chænocephali macrophylli, in campis prope Tucuman Rep. Argentina, Amer. austr.

PHÆOSPERMA (Sacc.) Traverso, Fl. Ital. Crypt. II, fasc. I (1906) p. 292. — Huc ducendæ sunt sec. Cl. Traverso: *Valsaria anserina* Sacc., *V. cariei* Sacc., *V. Saccardiana* Speg.

1. *Phæosperma ? fœniculinum* Spegazz., An. Mus. Nac. Buenos Aires 4669 t. XIX (1909) p. 371. — Peritheciis hinc inde matrice infuscata infossis, ostiolo vix rostellato armatis, subglobosis 120-130 μ . diam., coriacellis; ascis cylindraceis paraphysatis, octosporis, 125-150 \times 10; sporidiis didymis monostichis ellipsoideis 13-15 \times 8-9, medio 1-septatis, lenissime constrictulis, fuligineis, subæqualibus eguttulatis.

- Hab.* ad caules aridos putrescentesque Fœniculi piperiti Santa Catalina prope Buenos Aires Rep. Argentina Amer. austr.
2. **Phæosperma valdiviense** Speg., Fungi Chilense (1910) p. 70, cum 4670 icon. — Stromate effuso superficem matrix extus nigrificante, intus linea atra tenui, repando-sinuosa limitato; peritheciis stromate omnino infossis, laxe gregariis, globulosis, 500-750 μ . d., atris, ostiolo carbonaceo vix papillato exertulo, per ætatem deciduo atque stromata confertiuscule perforato-porosa relinquentे, donatis; ascis linearibus dense paraphysatis modice pedicellatis, octosporis, 150-160 \times 9-10; sporidiis subcylindraceis v. subelliptico-biconoideis, 1-septato-constrictulis, fuligineis, mediocribus, 18-24 \times 7-8, guttulatis.
- Hab.* in culmis siccis Chusqueæ valdiviensis, Bahia de Corral, Chile Amer. austr.
3. **Phæosperma leptosporum** Speg., Fungi Chilenses (1910) pag. 69, 4671 cum icon. — Peritheciis ligno omnino immersis, globosis minutis submembranaceis, 300-350 μ . diam., ostiolo brevi crassoque superficem matrix attingente sed non exerto, coronatis; ascis linearibus octosporis, parce paraphysatis, 200 \times 10; sporidiis subrectis monostichis, cylindraceo-subfusoideis, non v. lenissime subnavicularibus, medio 1-septatis non constrictis, loculis biguttulatis, fumoso-fuligineis, 25-30 \times 5-6.

Hab. in culmis emortuis Chusqueæ Cumingii, Cerro Ale gre de Valparaiso, Chile Amer. austr.

ENDOXYLINA Romell — Syll. XI p. 318, XVI p. 508.

1. **Endoxylina eutypoidea** Starb., Ascom. Schwed. Chaco-Cordill. Ex-4672 ped. Arkiv f. Bot. Bd. V (1905) pag. 28. — Stromate obsoleto, cortice nigrificato, forma vix mutato, longe lateque effuso; peri theciis gregariis, corticem protrudentibus, plane immersis, interdum intra matrix confluentibus, ostiolis magnis conoideis, non paullum dilatatis, interdum leniter stellatim sulcatis erumpentibus, 300-400 μ . diam., textura membranacea, dense prosenchymatica, nigra; ascis cylindraceis vel cylindraceo-clavatis, sursum rotundatis, deorsum longe pedicellatis, 107-127 \times 10-15,5; sporidiis octonis, recte, interdum imbricatim vel nonnullis oblique monostichis vel distichis, primo hyalinis quadriguttulatis, deinde medio septatis, constrictis, loculis conicis, utrinque obtusiusculis vel fere acutatis, fuligineis, 15-16 \times 6,5-7; paraphysisibus filiformibus, hyalinis.

Hab. in ramulis aridis Crotonis etc., Tatarenda, Gran Chaco Boliviae.

Sect. 6. Hyalophragmiæ.

HOLSTIELLA P. Henn. — Syll. XIV p. 593.

1. **Holstiella bipindiensis** P. Henn., Engl. Jahrb. XXXVIII (1905) 4678
 p. 127. — Stromatibus gregarie sparsis, erumpentibus, innato-superficialibus, angulato-pulvinatis, rugulosis, cinereo-fuscis intus citrinis dein atris, 1,5-2,5 mm. diam., ostiolis plurimis prominulis atris, dein annulato-depressis; peritheciis numerosis omnino immersis, ovoideis, atris; ascis elongato-clavatis, apice obtuse rotundatis, crasse tunicatis, basi pedicellatis, octosporis, 170-260 \times 20-28; paraphysibus filiformibus, ramosis, hyalinis; sporidiis subbitrastichis, longe fusoideis, crasse tunicatis, utrinque obtusiusculis, pluriseptatis (c. 12), constrictis, hyalinis, 40-50 \times 8-10.

Hab. in ramis corticatis, Bipindi Kamerun Africæ centralis (ZENKER). — *Hol. usambariensis* P. Henn. affinis sed differt stromatibus, ascis majoribus, sporidiis etc.

CALOSPORA Sacc. — Syll. II p. 231, IX p. 871, XI p. 341, XIV p. 593, XVII p. 717.

1. **Calospora Tamaricis** Maubl., Bull. Soc. Myc. France XXII (1906) 4674
 p. 68, cum icon. — Stromatibus corticolis, gregariis, nigris, 1-2 mm. latis, superne applanatis verrucosisque, epidermide circumscissa circumdatis; peritheciis in quoque stromate 5-12, globulosis v. mutua pressione angulosis, 250-300 μ . diam., ostiolo brevi, leniter prominulo; ascis apice attenuato-obtusis, breviter pedicellatis, 100-115 \times 14-16; paraphysibus numerosis, filiformibus, simplicibus, ascos superantibus; sporidiis octonis, distichis, primum lanceolatis, infra medium constricto-septatis, demum utrinque obtusis, rectis v. leniter curvulis, loculo superiore latiore, 2 rarius 3-septato, inferiore 1-2-septato, ad septum primarium valde constrictis, ad altera septa leniter, granulosis, hyalinis, 24-28 \times 8-9.

Hab. in ramis emortuis Tamaricis, Pornic Galliae. — *Var. zignelloides* Patouill. l. c. pag. 63, cum icon. — A typo differt peritheciis solitariis, dense gregariis, superficialibus in ligno decorticato; ascis et sporidiis ut in typo. — In iisdem ramis cum typo.

2. **Calospora ? bahiensis** Spegazz., Micromicetas de los Cacaoyeros, 4675
 Rev. Facult. Agronom. y Veter. t. II, La Plata (1906) nn. 4-6,

p. 306, fig. c. — Stromatibus cortice innatis tuberculoso-prominulis, subgloboso-depressis, gregariis saepe seriatis non vel parce confluentibus 1,5-6 mm. long., 1,5-3 mm. lat., 0,75-1 mm. cr. nigricantibus glabris, margine rotundatis superne convexulis ostiolis peritheciorum non v. vix prominulis nigris, areola candida indefinite latiuscula cinctis, intus subcarbonaceis, fuscis; peritheciis 2-6 in quoque stromate dense constipatis, omnino tectis et ostiolo vix papillato tantum indicatis, globosis, 250-300 μ . cr., crassiuscule membranaceis molliusculis, atris, contextu denso indistincto, fusco-olivaceo; ascis e cylindraceo clavatis antice obtuse rotundatis, postice attenuatis longiusculeque pedicellatis, p. sp. 180 \times 30, ped. 50 \times 8, paraphysibus filiformibus tenuibus sèpius ramulosis obvalbatis, fere semper tetrasporis; sporidiis rectis distichis, fusoideis, majusculis 60-70 \times 15-18, primo diblastis, serius 9-15-septatis, atque subtoruloso-constrictis, utrinque attenuatis subacutiusculis, hyalinis.

Hab. in cortice *Theobromæ Cacao* L., Bahia de todos los Santos, Brasilia (HEMPEL). — *Fungus lichenaceus*, gen. *Holstiellæ* affinis.

3. **Calospora oleicola** Speg., *Fungi Chilenses* (1910) p. 74, cum icon. 4676
— Peritheciis cortice innatis, epidermide disrupta velatis, pauci-gregariis, stromate parcissimo junctis, globulosis pusillis, vix papillato-ostiolatis, albo-farctis, 150-200 μ . diam.; ascis lanceolatis brevissime pedicellatis paraphysatis octosporis, 100-120 \times 20, sporidiis e cylindraceo subclavulatis utrinque obtusis, transverse 5-septatis, ad septum medium constrictis, parte infera quam supera conspicue minore, hyalinis, mediocribus, 22-26 \times 8-9.

Hab. in ramis *Oleæ europææ* quos necat, Quinta Normal de Santiago Chile, Amer. austr.

Sect. 7. Phæophragmiæ.

PSEUDOVALSA Ces. et De Not. — Syll. II p. 135, IX p. 820, XI p. 330, XIV p. 577, XVI p. 527, XVII p. 740.

1. **Pseudovalsa longipes** (Tul.) Sacc. — Syll. II, p. 136 — var. *apicalata* Rick, Broteria, IV (1905) p. 162. — Stromatibus erumpentibus, dein superficialibus, orbicularibus, nigris, 4 mm. diam., margine corticis obvallatis; peritheciis angulatis, ostiolis brevibus; ascis longe pedicellatis, parte sporifera usque ad 160-200 μ . longa, 15-18 μ . lata, maturis in apicem filiformem productis; sporidiis

usque ad 50-65 \times 8-10, fuligineis, triseptatis, ultimis cellulis hyalinis obtusis, non constrictis, fusoideis, guttulatis; paraphysibus filiformibus hyalinis.

Hab. in ramis *Quercus cocciferæ*, Torres Vedras Lusitanæ. — Species habitu fere *Diatrypellæ quercinæ* et forte *Melogrammati* affinior.

2. ? *Pseudovalsa Piri* (Hazsl.) Sacc. et Trav. — Syll. XX, p. 543 4678
Diaporthe Piri Hazsl. Sphær. Hung. pag. 200, t. XIII, f. 53. —
 Stromatibus conoideo-hemisphaericis, erumpentibus; peritheciis sat numerosis in ostiola fasciculata, divergentia spiniformia, basi in crassata longa productis; ascis fusoideis brevissime stipitatis; sporidiis subdistichis fusoideis, rectis, utrinque obtusulis, 3-septatis, non constrictis, hyalinis.

Hab. in ramis *Piri communis* in Hungaria. — Sec. auctorem *Diaporthe Strumellæ* affinis.

AGLAOSPORA De Not. — Syll. II p. 133.

1. *Aglaoospora aculeata* Petch, Ann. Roy. Bot. Gard. Peradenya, III, 4679 Pt. I (1906) p. 3. — Peritheciis immersis, discretis, 1 mm. diam. vel in stromate nigro carbonaceo aggregatis, 3-5 mm. diam. in collum conicum e cortice emergens 0,75-1,5 mm. productis; ostiolis discretis, rotundis; ascis cylindraceis, apice truncato attenuatis, stipite curvato, quadrisporis, 180-210 \times 30-35; sporidiis in medio asco maturato aggregatis, cymbiformibus, 90-105 \times 12-15, primum viridi-hyalinis, continuis, plasmate angulato, in guttam albam expulsis, deinde fuligineis, 7-11-septatis.

Hab. in ramis nigrificatis *Theæ viridis*, Ceylon.

TREMATOVALSA Jacobesco, C. R. Ac. d. Sc. Paris CXLII (1906) pag. 289 (Etym. *Tremato* breviatio *Trematosphaeræ* et *Valsa*). — Est *Pseudovalsa* sporidiis non appendiculatis. Genus inter *Trematosphaeriam* et *Pseudovalsam* medium, sed ut videtur valde heterogeneum.

1. *Trematovalsa Matruchoti* Jacobesco, l. c. pag. 289. — Peritheciis 4680 solitariis v. in stomate nigro carbonaceo plus minusve congregatis, primum immersis dein superficialibus, piriformibus, collo plus minusve elongato recto v. curvulo praeditis, 90-320 \times 80-230, parietibus carbonaceis, 10 μ . cr.; ascis octosporis cylindraceis 65-80 \times 6; paraphysibus filiformibus ascos æquantibus v. paullo superantibus;

sporidiis fusoideis brunneo-olivaceis v. lutescentibus, quadrilocularibus, loculis omnibus grosse 1-guttulatis, 14-16 μ . cr.

Hab. in ramis v. ad trunco, quos rimosos et cancerosos reddit in silvis Valachiae, Romania. — Verisimiliter status spermogonicus est *Cytopsora Tiliæ*, pycnidicus est *Phoma Tiliæ*.

THYRIDARIA Sacc. — Syll. II p. 140, IX p. 821, XI p. 331, XIV p. 578, XVII p. 741.

1. **Thyridaria Cajugæ** Rehm, Ann. Mycol. V (1907) p. 518. — Pe- 468 ritheciis sub cortice nidulantibus, valsiformiter 20-30 arcte congregatis, stromatico orbiculariter 1-2 mm. diam. ad apicem nigris collectis et obtectis, per epidermidem prorum pentibus, elongato-globosis, 0,5 mm. diam., membranaceis, collis elongatis in papillulas subglobosas obtusas, poro perspicuo pertusas abeuntibus; ascis clavatis, 50-60 \times 8-9, octosporis; sporidiis subclavatis, rectis v. subcurvatis, medio constrictis, utrinque obtusis, 4-cellularibus, fuscidulis, 10-12 \times 3-3,5, distichis; paraphysibus tenerrimis, subramosis.

Hab. ad ramulum Aceris, Ithaca New York Amer. bor. (W. A. RILEY, comm. Dr. ATKINSON). — *Thyridaria Comptoniae* subaffinis.

KALMUSIA Niessl — Syll. II p. 142, IX p. 822, XI p. 331, XIV p. 578, XVII p. 742.

1. **Kalmusia aspera** Morgan, Journ. of Mycol. XI (1905) p. 153. — 4682 Stromate eutypeo, effuso, indefinito, superficie ob ostiola prominula ruguloso, ligno supra atrato et profundius flavidio immerso; peritheciis majusculis, 0,7-1 mm. diam. depresso globosis, nigris, monostichis, immersis, dense confertis et confluentibus, ostiolis breviusculis, rudibus, subcylindraceis, integris; ascis cylindraceis, breviter pedicellatis, 150-180 \times 8-10, octosporis (paraphysatis?); sporidiis elliptico-oblongis, leniter curvis, 3-septatis, 17-21 \times 7-9, cellulis binis interioribus crassioribus et brunneis, apicalibus minoribus et hyalinis.

Hab. in ligno dejecto indurato Gleditschiæ spec., Preston, Ohio Amer. bor.

2. **Kalmusia eucalyptina** Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 385 — Peritheciis ligno denudato infossis plus minusve prominulis acuteque ostiolatis subseriatim mediocribus, subglobosis sed e latere compressis 300-500 μ . diam.; ascis subfusoideis sub-

breviuscule pedicellatis, 120 \times 12, octosporis, dense paraphysatis; sporidiis subcylindraceis, primo 1-septatis hyalinis, serius 3-septatis chlorinis, 20-22 \times 6-8.

Hab. ad palos vetustos Eucalypti globuli diu intemperiis expositos, La Plata Rep. Argentina Amer. austr.

3. *Kalmusia coffeicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 4684 (1909) p. 386. — Peritheciis matrice infossis carbonaceis ostiolo non rarius exsertulo armatis, globosis 120-180 μ . diam.; ascis subclavatulis breviter pedicellatis 40-60 \times 9-10, paraphysatis; sporidiis distichis ellipsoideo-subclavulatis, primo didymis hyalinis serius triseptatis ad septum medium validius constrictulatis, 12-15 \times 4, e fuligineo olivaceis.

Hab. ad ramos emortuos Coffea arabicae in hortis Orán, Jujuy Rep. Argentina Amer. austr.

4. *Kalmusia ?oranensis* Speg., An. Mus. Nac. Buenos Aires t. XIX 4685 (1909) p. 386. — Peritheciis hinc inde cortice immutato 3-5-gregariis, matrice infossis non vix ostiolo papillulato exerto manifestis, subglobosis 150 μ . diam.; ascis clavatis modice pedicellatis 120 \times 20-22, octosporis paraphysatis; sporidiis distichis, fusoideis 5-septatis, 40 \times 10, non constrictis, fuligineis.

Hab. ad corticem crassiorem ramorum emortuorum Coffea arabicae, in hortis Orán Jujuy Rep. Argentina Amer. austr.

5. *Kalmusia chilensis* Speg., Fungi Chilenses (1910) p. 83, cum icon. 4686 — Peritheciis laxissime gregariis ligno denudato omnino immersis, ostiolo papilliformi vix exerto coronatis, carbonaceis subglobosis parvis, 150-200 μ . diam.; ascis cylindraceis brevissime pedicellatis densissimeque paraphysatis, 120-130 \times 15-16; sporidiis 3-septatis, ad septum medium tantum leniter constrictis fuligineis, loculis mediis obscurioribus grosse uninucleatis, 20-24 \times 10-11.

Hab. in ramis emortuis Proustiae pungentis in collibus prope Batuco Chile Amer. austr.

6. *Kalmusia Lactuca* Rehm, Ann. Mycol. VII (1909) p. 528, Ascom. 4687 Exsicc. fasc. 45, n. 1865. — Stromate eutypeo, peridermio demum denigrante; peritheciis cortici interiori primitus albo, dein nigrescenti supra lignum demum denigrato innatis, saepe dense gregariis, interdum subdispersis, semper peridermio tectis, globosis, glabris, contextu membranaceo, papillula minutissima nigra, obtusa, solum in peridermio hemisphaerico-elato prominente, 0,15-0,2 mm. diam.; ascis clavatis, apice rotundatis, 70-75 \times 12, 8-sporis; sporidiis ellipsoideis, rectis v. subcurvatis, 3-septatis, ad septa vix constrictis.

ctis, cellulis plerumque 1-guttatis, fuligineo-fuscis, 18-20 \times 6-7, distichis; paraphysibus filiformibus 2 μ . cr.

Hab. ad basim caulinum emortuorum Lactucæ salignæ pr. Hadern-Monachium (Doct. REHM).

MELOGRAMMA Tul. — Syll. II p. 144, IX p. 824, XI p. 331, XIV p. 579, XVI p. 527, XVII p. 742.

1. **Melogramma Pirottæ** Bacc., Funghi Eritrea, Ann. Bot. vol. IV 4688 (1906) p. 274, tav. X, fig. 1. — Stromatibus atris primitus cylindricis, in cortice nidulantibus dein erumpentibus, ac parte emersa pulvinata, lata mm. 3 et ultra; peritheciis confertis, piriformibus, ostiolo papillato prominulis, monostichis 200 μ . latis; ascis fusoides, sessilibus, a paraphysatis 90 \times 18; sporidiis fusiformibus omnino atris, initio bilocularibus, dein 3-5-septatis, medio constrictis, 45 \times 9.

Hab. in ramis languentibus Euphorbiæ spec. in Erythraea (BALDRATI).

2. **Melogramma Henrietii** Briosi et Cav. Funghi parass. n. 305 (ex- 4689 sicc.) cum icon. — Stromatibus eximie erumpentibus, subglobosis v. obtuse conoideis, nigris, rugulosis, 1,5-2 mm. diam.; peritheciis sphæroideis prominulis, ostiolis plus minus emergentibus obtusis; ascis clavatis brevissime crasseque stipitatis, apice rotundatis membrana cito diffluente, octosporis; sporidiis distichis v. subtristichis, fusoides, triseptatis, 48-58 \times 10, rectis, utrinque obtusulis, castaneo-fuscis, loculis extimis pallidioribus.

Hab. in cortice Quercus Suberis in Algeria (HENRIET, nemorum inspector). — A *M. vagante* sporidiis diversis cito distinguitur.

Sect. 8. Hyalodictyæ.

LEUCOTHYRIDIUM Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 388 (Etym. *leucos* albus et *Thyridium*, h. e. *Thyridium hyalodictylum*). — Stromata eutypea late effusa nigra. Perithecia matrice omnino immersa, globulosa, sparsa v. confertiuscula. Ascii clavati, paraphysati octospori; sporidia muralia hyalina muco vestita.

1. **Leucothyridium crustosum** Speg., l. c. p. 388 cum icon. — Stromate nigro per matricem late ambiente; peritheciis hinc inde laxe gregariis saepe subseriatis globulosis 150 μ . diam.; ascis breviter pedicellatis, late clavatis, supra crasse tunicatis, 70-80 \times 25, para-

physatis octosporis; sporidiis conglobatis v. subtristichis elongato-ovobovatis, didymo-5-septatis, ad septum medium valide constrictis, 20 \times 10.

Hab. ad ramos emortuos Coffea arabicae prope Orán, Jujuy Argentina Amer. austr.

PLEOMELOGRAMMA Speg., An. Mus. Nac. Buenos Aires t. XIX (1909)

p. 389 (Etym. *pleon* plus et *Melogramma* h. e. *Melogramma dictyosporum*). — Stromata superficialia; perithecia minuta dense constipata tecta; ascii octospori; sporidia muralia hyalina.

1. **Pleomelogramma argentinense** Speg., l. c. pag. 389, cum icon. — 4691
Stromatibus parvis intus albis lenticulari-tuberculiformibus, 2-5 mm. diam. et 1-2 mm. cr.; peritheciis globosis, coriaceis, atris, 90-120 μ . diam.; ascis saepius obclavatis, brevissime stipitatis 50-55 \times 10-15, aparaphysatis, octosporis; sporidiis distichis ellipsoideo-fusoideis, transverse 5-septatis, longitudinaliter interrupte 1-2-septatis, 15-20 \times 6-7, ad medium præcipue constrictulis, hyalinis.

Hab. ad trunco ramosque cariosos decorticatos Eriobotryæ japonicæ, Santa Catalina prope Buenos Aires Rep. Argentina Amer. austr.

Sect. 9. Phæodictyæ.

THYRIDIUM Sacc. — Syll. II p. 323, IX p. 920, XI p. 348, XIV p. 609, XVI p. 553, XVII p. 767.

1. **Thyridium Verbæ** Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4692 (1908) p. 127. — Peritheciis globosis 250-500 μ . diam., ligno denudato cinerescente omnino immersis; ascis cylindraceis brevissime pedicellatis, apice rotundatis crasseque tunicatis, 150 \times 10-12, octosporis, dense paraphysatis; sporidiis ellipsoideis oblique monostichis, triseptatis, ad septa, præcipue medium constrictulis, loculis longitudinaliter divisis, 16-18 \times 8-9, fuligineis.

Hab. ad trunco ramosque emortuos decorticatosque Ilicis paraguariensis in silva circa S. Pedro Argentina Amer. austr.

2. **Thyridium Sambuci** Earle, Bull. of the New York Bot. Gard. 4693 (1904) p. 294. — Peritheciis areas latas tegentibus, 6-8 in greges dispositis v. sparsis, infossis nigris, carbonaceis, non collabescentibus, 300-400 μ . diam., ostiolo erumpenti, minute papillato, liberis (non valsiformibus); ascis cylindraceis, stipitatis, 150-200 \times 17-20; para-

physibus copiosis, filiformibus; sporidiis monostichis, fuscis, ellipsoideis, saepe curvulis, 5-septatis, septo medio constrictis, uno v. pluribus cellulis mediis verticaliter divisus, 30-35 \times 10-14.

Hab. in ramis emortuis Sambuci, Snow Valley Peak, Ormsby Co. Nevada Amer. bor. (C. F. BAKER).

3. **Thyridium valparadisiacum** Speg., Fungi Chilenses (1910) p. 93, 4694 cum icon. — Peritheciis ligno omnino infossis, lenticularibus, e latere saepius compressulis, membranaceis, nigris, ostiolo minuto ægre perspicuo superficem matrix attingente donatis, 150-200 μ . diam.; ascis e cylindraceo subclavulatis brevissime pedicellatis, octosporis, 150 \times 20-22, paraphysibus filiformibus ramulosis obvallatis; sporidiis ellipsoideo-didymis, utrinque subacutiusculis, transverse 7-, longitudinaliter 1 v. 2-septatis, mediocribus, olivaceis.

Hab. in ramis emortuis Lobeliae salicifoliæ, Cerro Alegre de Valparaíso Chile Amer. austr.

4. **Thyridium argentinense** Speg., An. Mus. Nac. Buenos Aires t. XIX 4695 (1909) pag. 399. — Peritheciis ligno immutato totaliter infossis ostiolo vix papillato-prominulo manifestis, globosis, 150-180 μ . diam.; ascis subclavulatis breviter pedicellatis, 100 \times 16-18, dense longeque paraphysatis, octosporis; sporidiis ellipsoideis mono- v. distichis, transverse 7-septatis, septo longitudinali unico, olivaceis, 22-24 \times 9-10.

Hab. ad ramos emortuos Ricini communis in sepibus La Plata Rep. Argentina Amer. austr. — *Th. platensi* Speg. valde affinis species, notis tamen plurimis, ut videtur, distincta.

5. **Thyridium coffeicola** Speg., An. Mus. Nac. Buenos Aires t. XIX 4696 (1909) pag. 389. — Peritheciis cortice crassiore omnino infossis ostiolo vix papillato coronatis, solitariis v. laxe gregariis, globosis, 0,8-1,2 mm. diam., carbonaceis; ascis clavatis, diffluentibus, dense pseudoparaphysatis, octosporis; sporidiis cylindraceo-subellipsoideis, di-tristichis, 50 \times 15, transverse 7-9-septatis, septo altero longitudinali interrupto donatis, fuligineis.

Hab. ad trunco ad ramos vetustiores Coffea arabicae, Orán, Jujuy Argentina Amer. austr.

6. **Thyridium cacheutense** Speg., An. Mus. Nac. Buenos Aires t. XIX 4697 (1909) p. 399. — Peritheciis laxe gregariis, ostiolo papillato erumpente vix manifestis, subglobosis, 250-300 μ . diam., matricem intus pulchre roseo tingentibus; ascis subclavatis basi pedicello brevi crassoque suffultis, octosporis, 120-130 \times 18-20, paraphysibus denissime obvallatis; sporidiis oblique distichis, saepius biconico-elli-

psoideis v. leniter subnavicularibus, 28-33 \times 12-15, transverse 7-longitudinaliter 2-3-septatis primo hyalinis demum fuligineis.

Hab. vulgatum ad ramos crassiores emortuos Baccharidis glutinosæ in alveo fluminis Mendozae prope Cacheuta Rep. Argentina Amer. austr.

FENESTELLA Tul. — Syll. II p. 325, IX p. 922, XI p. 349, XIV p. 610, XVI p. 553, XVII p. 766.

1. **Fenestella praæandina** Speg., An. Mus. Nac. Buenos Aires t. XIX 4698 (1909) p. 400. — Stromatibus saepius irregulariter linearibus 5-20 mm. long., 1-2 mm. cr., gibbulosis atris, perithecia vix prominula ostiolo vix papillata crasso coronata subcarnosulo-coriacella, atra, 300-400 μ . diam., obvolventibus; ascis linearibus paraphysatis, 200-255 \times 18-20, octosporis; sporidiis mediocribus ellipsoideis transverse 3-, verticaliter 1-septatis, lutescenti-olivaceis, 32-34 \times 11-12.

Hab. ad ramos crassiores emortuos Proustiæ ilicifoliæ in præandinis Cacheuta prope Mendoza, Argentina Amer. austr.

2. **Fenestella subvestita** Ferdinand. et Winge, Botan. Tidsskrift 29 4699 Bd. (1909) p. 313, fig. 5. — Peritheciis denis-vicensis in cortice exteriori circinato-confertis, ostiolis disciformi-conglutinatis per peridermum pustuliformiter levatum erumpentibus, flocco flavidulo parce obsessis, zonula flavo-brunnea, e substantia mutata corticis formata, 1,5-2,5 mm. diam. cinctis; ascis cylindraceis, superne appланato-rotundatis, parte sporifera 100-125 μ . long., 8-10,5 μ . lat., pedicello circ. 25 μ . long. instructis; sporidiis octonis v. rarius quaternis, monostichis, ellipsoideis, transverse crasse 3-septatis, loculo uno ex duobus mediis interdum septo longitudinali obliquo instructo, ad septa vix constrictulis, 15-19 \times 7,5-8,5, griseolobrunneis, irregulari-guttulatis; paraphysibus numerosis, filiformibus, guttulatis, 3 μ . crass., ascis parum superantibus; pycnidii parietibus anfractuosis spurie v. omnino multilocularibus, sporulas in basidiis e basi ramosis, 15-20 μ . long., solitariae acrogenas, oblongo-bacillares, 2-3 \times 0,75, hyalinas foventibus.

Hab. ad ramos sicclos corticatos Alni glutinosæ in pelude Lyngby Mose dicta prope Hafniam Danæ.

3. **Fenestella endoxantha** Speg., An. Mus. Nac. Buenos Aires t. XIX 4700 (1909) p. 400. — Stromatibus peridermio innatis, difformibus, extus fuscis intus citrinis, irregulariter sublenticularibus 1,5-2,5 mm. diam., favoso-loculigeris; peritheciis stromate infossis, paucis, globosis 250-400 μ . diam., fulvo-fuscis; ascis linearibus paraphysatis

crasseque pedicellatis, parte spor. 120 \times 15, ped. 15-20 \times 8-10; sporidiis oblique monostichis, obtusissime ellipsoideis, 20 \times 10, transverse 3-, longitudinaliter 1-septatis, primo hyalinis dein subopace fuligineis.

Hab. ad ramos emortuos Casuarinae strictæ in hortis Claypole prope Buenos Aires Rep. Argentina Amer. austr.

Sect. 10. Scolecosporæ.

CRYPTOSPORA Tul. — Syll. II p. 361, IX p. 339, XI p. 353, XVII p. 776.

1. **Cryptospora Saccardiana** Trav. et Spessa, Bol. Soc. Brot. XXV 4701 (1910) pag. 168, t. I, f. 4. — Pustulis dense sparsis, ellipsoideis, 1 $\frac{1}{2}$ \times $\frac{1}{2}$ mm., albescentibus; stromate cortice nidulante, tenui, nigro; peritheciis 2-3 stromate basi tantum immersis, globulosis, 140-160 μ . diam., contextu melleo tenui, collibus late conoideis peridermum pustulatum sublevantibus et demum perforantibus; ascis ellipsoideis vel late fusiformibus, subsessilibus, membrana tenuissima præditis, octosporis, 90-120 \times 25-35; sporidiis parallele fasciculatis, cylindraceo-vermicularibus, asco paulo brevioribus, utrinque rotundatis, leniter curvatis vel subrectis, 2-5-septatis vel pseudo-septatis, initio hyalinis dein vix fuscidulis, 70-100 \times 6-8.

Hab. in ramis Cinnamomi dulcis in Horto Botanico co-nimbricensi Lusitaniæ (A. MOLLEB).

2. **Cryptospora suffusa** (Fr.) Tul. — Syll. II, p. 361. — var. **val-4702 soides** Rehm, Ann. Mycol. IV (1906) p. 476. — A typo differt peritheciis magis copiosis (12-18), stromate nigro prorumpente, usque ad 3 mm. longo; ascis angustioribus 8-9 μ . lat.

Hab. in ramis emortuis Alni viridis, Wechsel Austriae inf. (v. HÖHNEL).

3. **Cryptospora chilensis** Speg., Fungi Chilenses (1910) p. 96, cum 4703 icon. — Stromatibus ligno denudato subcinerescente innato-insidentibus, vix prominulis, parvulis, ellipsoideis, cinereo-fuscis; peritheciis in quoque stromate paucis (2-5) majusculis omnino immersis, circinantibus, 700-750 \times 300; ascis linearibus breviter pedicellatis paraphysatis, 500 \times 10-11; sporidiis filiformibus multiseptatis perdilute chlorinis, ascos subæquantibus, loculis singulis 10 \times 2.

Hab. in ramis siccis Proustiae pungentis in collibus prope Batuco Chile Amer. austr.

WINTERELLA Sacc. — Syll. II p. 364, XIV p. 620.

1. **Winterella Yerbæ** Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4704 (1908) p. 128. — Peritheciis sparsis v. laxe gregariis ligno dealbato omnino immersis, globosis, 250-400 μ . diam., membranaceis; ascis cylindraceo-fusoideis antice acutiusculis rotundatis crasseque tunicatis postice sensim breviterque cuneato-pedicellatis, 120-150 \times 10-12, octosporis, laxe tenuissimeque paraphysatis; sporidiis fasciculatis filiformibus multiseptulatis, hyalinis, 100-120 \times 2-2,5.

Hab. ad ramos aridos decorticatos Ilicis paraguariensis circa S. Pedro Rep. Argentina Amer. austr.

2. **Winterella platensis** Speg., An. Mus. Nac. Buenos Aires t. XIX 4705 (1900) p. 403. — Stromatibus effusis, repando-ellipsoideis, 2-10 mm. long., 1,5 mm. lat., primo tectis dein superficialibus, atris levibus; peritheciis sub cortice stromatico dense constipatis, sublenticularibus 150-250 μ . diam.; ascis fusoideis, basi breviter attenuato-pedicellatis, 100 \times 12-13, a paraphysatis, octosporis; sporidiis acicularibus 70-80 \times 3, multi-guttulatis, hyalinis.

Hab. ad ramos aridos, frigore hiemali enecatos Pircuniæ dioicæ in silva Santa Catalina Rep. Argentina Amer. austr.

3. **Winterella Rickiana** Rehm, Ascom. exs. n. 1741 (1907), Ann. Myc. 4706 V (1907) p. 470. — Stromatibus superficialiter innatis, orbicularibus, maculatim plus minusve dispersis v. congregatis, plerumque in longitudinem ramuli expansis, atris; peritheciis 3-5 (rarius pluribus) innatis verrucoso-elevatis, c. 2 mm. diam.; peritheciis globulosis, membranaceis, parenchymatice contextis, glabris, 300 μ . circ. lat., ostio subconoideis, poro conspicuo demum pertusis; ascis cylindraceis, versus apicem angustatis, 120 \times 8-10, tetrasporis; sporidiis filiformibus, rectis, hyalinis, obtusis, pluries septatis, c. 90 \times 3, parallele positis; paraphysibus longis, septatis, hyalinis, 4 μ . cr.

Hab. in arbore ignoto vulgo «Achaete» Sao Leopoldo Rio Grande do Sul Brasilia (Rick S. J.).

SILLIA Karst. — Syll. II p. 361.

1. **Sillia biformis** Rick, Broteria V (1906) p. 49. — Stromate pulvinato, 1-3 cm. diam., brunneo hypoxiloideo, superficiali, intus flavo-viridulo; peritheciis aggregatis, primitus in stromate nidulan-

tibus collo pertuso, demum superficialibus, atris, coriaceo-rigidis, rugulosis, subhirsutis, 0,5 mm. latis, ostiolo brevi aut longiusculo; ascis 70-80 \times 6-8, sessilibus; sporidiis filiformibus, 60 \times 2, hyalinis v. subflavidulis, septatis, apicibus acutis, curvulis, octonis; paraphysibus dilutis.

Hab. in ramo corticato, Rio Grande do Sul Brasiliæ. — In stromate juniore inveniuntur conidia ovalia, 10 \times 6, fuliginea, unicellularia.

Fam. 6. Pseudosphaeriaceæ v. HÖHNERL.

PSEUDOSPHÆRIACEÆ v. Höhnel Sitzb. k. Ak. d. Wiss. Wien Bd. CXVI (1907) Abt. I, Fragm. z. Myk. III, p. 129 et IV (1907) p. 631. — Stromata minuta, immersa, perithecioidea, plurilocularia. Asci singuli in quoque loculo; sporidia varia. Familiola, ut videtur, inter Sphaeriaceas et Dothideaceas media. — Teste von Höhnel, præter *Pseudosphaeriam* et *Wettsteininam*, huc quoque pertinent *Scleroplea* Sacc. et *Pyrenophora* Fr.

WETTSTEININA v. Höhnel, Fragm. z. Mykol. III, Sitzb. k. Ak. d. Wiss. Wien, Bd. CXVI, Abt. I (1907) p. 126 (Etym. ab Eq. R. Wettstein prof. vindobonensi). — Stroma minutum, rotundatum v. discoideum, immersum, dein epidermide lacerata liberum, nigrum, perithecioideum, pseudoparenchymate polyedrico constitutum; loculi parci, unistratosi, ascum unicum ovoideum octosporum limitantibus; sporidia hyalina, bilocularia, cellulæ inæqualiter crasse intus ob 1-3 annulos parum prominentes simulate divisæ. — Huc ducentæ sunt species (saltem teste von Höhn. l. c. CXVI (1907) p. 129 et 635): *Massarina gigantospora* Rehm — Syll. IX, p. 825 — *Leptosphaeria mirabilis* Niessl — Syll. II, p. 33 — *Sphaerulina callista* var. *Vossii* Rehm — Syll. IX, p. 847.

1. **Wettsteinina gigaspora** v. Höhnel, Fragm. z. Mykol. III, Sitzb. k. Ak. d. Wissensk. Wien Bd. CXVI, Abt. I (1907) p. 126, tab. 1, fig. 1 a-e (sub nomine *W. alpina*!). — Stromatibus sparsis carbonaceis, nitidis, nigris, 500-700 μ . lat., 260 μ . cr.; hypothecio 60-70 μ . cr. contextu sterili 150-200 μ . lato; loculis 5-6, irregulariter ovoideis; asco parietibus usque ad 15 μ . cr., irregulariter ovoideo, plerumque octosporo. 180-240 \times 120-140; sporidiis con-

globatis, hyalinis, utrinque rotundatis, 120 \times 44, bilocularibus, tunica duplice interna tenui cum lineis anuliformibus parum prominentibus, externa 8 μ . circ. cr.; contextu minute granuloso.

Hab. in caulis siccis Monocotyledoneæ cujusdam prope Gurschewy et Cej in Romania (LORTLESBERGER).

PSEUDOSPHÆRIA von Höhnel, Fragm. z. Mykol., Sitzb. k. Ak. d. Wiss. Wien, Bd. CXVI, Abt. I (1907) pag. 129 et 635 (Etym. *pseudes* falsus *Sphæria*). — A genere *Wettsteinina* distinguitur imprimis sporidiis genuine plurilocularibus, non bilocularibus et tantum polyblastis. — Ad hoc genus, teste v. Höhn., spectant *Sphaerulina callista* Rehm — Syll. II, p. 188 — et *Leptosphaeria pachyasca* Niessl — Syll. II, p. 171 (*Metasphaeria*).

Fam. 7. Dothideaceæ NITSCHKE

Sect. 1. Allantosporæ.

DOTHIDEOVALSA Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 414 (Etym. *Dothidea* et *Valsa* inter quas media). — Stromata inato-erumpentia tumidula atra; loculi minuti immersi albo-farcti; asci clavulati octospori; sporidia parva, allantoidea curvula, hyalina.

1. **Dothideovalsa tucumanensis** Speg., l. c. pag. 414. — Stromatibus linearibus erumpentibus 1-10 mm. long., 1-1,5 mm. cr., saepius dense gregariis et ramulum late ambientibus, intus extusque nigris, glabris, levibus vix rugulosis, loculis globosis vix papillato-ostiolatis; ascis clavulatis 18-20 \times 3, apophysatis; sporidiis 2-3-stichis, cylindraceis curvulis, utrinque rotundatis 4-6 \times 1, primo hyalinis serius subchlorinatis.

Hab. vulgata ad ramulos vivos Chætothylacis tocantini in Parque Roca, Tucuman, Argentina Amer. austr.

Sect. 2. Hyalosporæ.

BAGNISIELLA Speg. — Syll. II p. 589, IX p. 1004, XVI p. 616.

1. **Bagnisiella Rübsameni** P. Hern., Hedwigia XLVII (1908) p. 268. 4710 — Stromatibus caulinolis tumescientibus, erumpentibus, cæspitosis,

subgloboso-confuentibus, subcoriaceis, atro-fuscis, loculis immersis, subovoideis; ascis clavatis apice rotundatis, tunicatis, 8-sporis, 80-100 \times 20-26; paraphysibus copiosis, hyalinis; sporidiis oblonge ellipsoideis, clavatis v. subfusoideis, utrinque obtuso-rotundatis, continuis, hyalinis, 20-32 \times 9-12.

Hab. in ramis Cassiæ sp., Surinan, Rio Parà Amer. merid. (MICHAELIS).

2. **Bagnisiella Uncariæ** (Rac.) Sacc. et Trott., *Botryosphaeria Uncariae* 4711 Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 393. — Stromatibus epiphyllis, nigris, rotundatis 0,5 mm. alt., 1-3 mm. latis, medio depressis et saepe centro perforatis; peritheciis circulariter dispositis, globosis, 350-500 μ . lat., excipulo vix discreto, ad marginem stromatis immersis, ostiolo minuto, impresso; ascis breviter clavatis octosporis; sporidiis ovoideis utrinque rotundatis, rectis v. leniter flexis, continuis, hyalinis, levibus, 19-24 \times 8-11.

Hab. in foliis Uncariæ spec. prope Soekanegara-Preanger ins. Javæ.

3. **Bagnisiella tjampeana** (Rac.) Sacc. et Trott., *Botryosphaeria tjampeana* 4712 Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 392. — Hypophylla; stromatibus extus nigris, intus albido-brunneis, 680-800 μ . diam. peritheciis copiosis, globosis, 300-340 μ . diam., stromate immersis, ostioloque 200-220 μ . longo, in stromatis superficiem dehiscente, papillaque depressa præditis; ascis a paraphysatis, stipatis, octosporis 38-43 \times 10-12 (in medio); sporidiis in medio asco cruciatim positis, continuis, levibus, hyalinis, ovoideis, 9-11 \times 3-4.

Hab. in foliis Malloti Blumeani, ad gallas globulosas nervicolas, Tjampea pr. Buitenzorg ins. Javæ.

4. **Bagnisiella Molluginis** (v. Höhn.) Sacc. et Trott., *Botryosphaeria Molluginis* v. Höhn., Sitzb. k. Ak. Wien, CXV, Abt. I (1906) pag. 18. — Stromatibus sparsis, erumpentibus subrotundis v. oblongis, discoideis, epidermide cinctis, nigris, carbonaceo-molliusculis, subinde concaviusculis, 0,5-1 mm. lat., 260 μ . cr., cellulis polyedricis, 25 μ . diam.; loculis copiosissimis (50-70) unistratosis, ovato-oblongis, 100 \times 50-80; ascis copiosis, clavatis, sessilibus, 60-80 \times 8-10, 6-8-sporis; sporidiis ellipsoideo-fusiformibus, utrinque obtusulis, 14-18 \times 5-7, hyalino-factis, eguttatis.

Hab. in caulibus emortuis Galii Molluginis in comit. Pressburg Austriæ (A. ZAHLBRUCKNER). — E descriptione, a typō generis (*B. Bérengeriana*) loculis omnino immersis longe recedit.

5. **Bagnisiella anceps** (v. Höhn.) Sacc. et Trott., *Botryosphaeria an-* 4714

ceps v. Höhn. Fragm. Mykol. VII (1909) p. 28. — Stromatibus superficialibus, nigris, rugulosis, perithecioideis, inæqualiter globosis, depressiusculis, sparsis v. minute aggregatis, basi angustata sessilibus, 360-500 \times 300-360, intus 1-locularibus, cortice carbonaceo 40-100 cr., extus rugoso, cellulis 20 μ . diam. nigris conflato; loculo astomo, vertice diffracto-dehiscente; ascis copiosis, crasse clavato-fusoideis, superne crasse tunicatis, rotundatis, deorsum in stipitem 40 μ . long., filiformem tenuatis, octosporis, 105-150 \times 22-32; sporidiis subdistichis, teneris, minute flavidо-granulosis, continuis, versiformibus, ex ovoideo fusoideis, utrinque obtusis, 22-28 \times 11-17; paraphysibus genuinis nullis.

Hab. in ramis tenellis emortuis, São Paulo Brasiliæ (WETTSTEIN et SCHIFFNER). — A typo *Botryosphaeria* omnino desciscens.

OXYDOTHIS Penz. et Sacc. — Syll. XIV p. 674.

1. **Oxydothis insignis** Spegazz., Fungi Paulist., Rev. Mus. La Plata 4715 t. XV (1908) p. 26, fig. G. — Stromatibus parenchymate innatis, repando-suborbicularibus 1-2,5 mm. diam., duriusculis subcarbonaceis, intus extusque nigerrimis, ad epiphyllum vix prominulis saepius obsoletis, cinerescenti-squarrulosis punctulatis v. concaviusculis, ad hypophyllum pulvinulatis non v. vix bullosis, semper maculis sordide fusco-ferrugineis latiusculis subdeterminatis cinctis; loculis globosis v. e mutua pressione angulatis, 125-175 μ . diam., nucleo albo farctis, ad hypophyllum adpressis, ostiolo minuto perforatis; ascis antice obtusis crassiusculeque tunicatis postice cu-neatis breviuscule pedicellatis, 100-120 \times 15-20, paraphysibus filiformibus sublongioribus obvallatis; sporidiis distichis v. congregatis utrinque acutissimis 4-blastis 55-60 \times 8, serius forsitan didymis, 40 \times 8, fusoideis, sublunatis v. sigmoideis, utrinque appendice elongato-conoidea 10-12 μ . auctis, semper tamen hyalinis.

Hab. ed folia Eugeniae cujusdam prope Ipiranga Moca Brasiilia (USTERI).

2. **Oxydothis pertusarioides** Rehm, in Ann. Mycol. V (1907) p. 530. 4716 — Stromatibus dense gregariis, ovato-orbicularibus, applanatis, in cortice griseo-albo rugosulo prominenter innatis ab eoque obductis, intus griseis, 1-1,5 mm. lat., 1 mm. alt., loculis in quoque stroma 2-3 oblongis, 0,3-0,5 μ . long., apice angustatis et in disculum punctiformem nigrum, impressum abeuntibus, contextu stromatis et hypothecii griseo-albo, crasso, parenchymatico, gonidiis carente; ascis clavatis, crasse tunicatis, apice rotundatis, circiter

150-180 \approx 50-60, octosporis; sporidiis oblongo-fusiformibus, utrinque rotundatis, rectis vel subcurvatis, 1-cellularibus, hyalinis, episporio 5-6 μ . cr. intus granulosis, dilutissime flavidulis, 110-115 \approx 23-30, distichis; paraphysibus ramosis, septatis, 5 μ . cr., hyalinis; epithecium dilutissime fuscidulum formantibus. — Jodii ope ascotati valde cæruleo tinguntur.

Hab. ad ramulum, Alta da Serra, S. Paulo, Brasilia (USTERI). — Habitus lichenoideus; a typo *Oxydothidis* sporidiis utrinque rotundatis recedit, hinc quoad genus dubia stirps.

PHYLLACHORA Nits. — Syll. II p. 594, IX p. 1006, XI p. 368, XIV p. 663, XVI p. 617, XVII p. 828.

1. **Phyllachora Erythroxili** Rehm, Annal. Mycol. VI (1908) p. 318. 4717
— Stromatibus punctiformibus, epiphyllis, in folio haud decolorato gregariis, late dispersis, sensim 2-5 lineariformiter connatis, circinantibus, 0,15-0,3 mm. diam., subconoideis, sessilibus, poro perspicuo pertusis, atris; ascis fusiformibus, 50-60 \approx 12-14, octosporis; sporidiis fusoideis, utrinque acutatis, rectis, hyalinis, 1-cellularibus, 20-22 \approx 4, bi-tri-stichis; paraphysibus mucosis.

Hab. ad folia *Erythroxili* suberosi, Villa Mariana, Sao Paulo Brasiliae (USTERI) — Habitus potius *Physalosporæ*; affinis *Phyll. Collææ* et *Ph. Condalice*.

2. **Phyllachora corallina** von Höhn. Fragm. Mykol. VII (1909) in 4718 Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 845. — Maculis nullis; stromatibus hypophyllis, omnino adnatis, depressis, nigris, nitidulis rugulosis, æqualibus, ostiolo plus minus depresso v. leviter 30-40 μ . lato præditis, 200-250 μ . diam., rotundatis v. usque ad 1,5 cm. elongatis, dentritice-coralloideo-reticulato ramosis; contextu stromatis parenchymatico; loculis laxiusculis infra depressis, supra conoideo-angustatis, 160-230 μ . latis et altis; ascis cylindraceis, breviter stipitatis, 70-80 \approx 5-6; paraphysibus filiformibus, paucis v. nullis; sporidiis monostichis, hyalinis, ellipsoideis, utrinque acutatis, 8 \approx 4.

Hab. in foliis vivis verisimiliter Rutaceæ cuiusdam (? Clusena, ? Murraya), in silva primæva pr. Tjibodas in ins. Java (SCHIFFNER).

3. **Phyllachora intermedia** Speg. — Syll. IX, p. 1012 — var. *luxurians* Rehm, Ascom. Exsicc. fasc. 37, n. 1660, Ann. Mycol. IV (1906) pag. 406. — Stromatibus caulicolis, magnis, gallæformibus,

eximie papillatis, usque ad 3 cm. longis et latis, usque ad 2 cm. altis.

Hab. in ramulis Sapindaceæ, São Leopoldo Rio grande do Sul, Brasilia. (J. RICK).

4. **Phyllachora duplex** Rehm, Ann. Mycol. VI (1909) pag. 538. — 4720
 Stromatibus in centro macularum orbicularium demum confluentium, tenuissime fuscidulo-cinctarum, arescendo albo-roseolarum, 0,8-1 cm. diam., sessilibus, epiphyllis, haud conspicuis in hypophyllo, irregulariter orbicularibus, 0,3-0,5 mm. diam., verruculosis, atris, haud nitentibus; loculis innatis 12-15, globosis, papillula minutissima prominentibus; ascis cylindraceis 120 \times 15, octosporis, J-; sporidiis ellipsoideis, utrinque rotundatis, unicellularibus, guttas oleosas 2 magnas includentibus, hyalinis, 18 \times 10, monostichis; paraphysibus ramosis, 3 μ . cr.

Hab. ad folia Serjaniae, São Leopoldo Rio Grande do Sul Brasilæ (THEISSEN S. J.). — *Dothidellæ Serjancæ* affinis sed omnino diversa. In ramulis adest *Euryachora duplicata* Rehm n. sp.

5. **Phyllachora Leeæ** Koord., Botan. Untersuch. (1907) pag. 182. — 4721
 Stromatibus amphigenis, tectis, vix erumpentibus, sparsis, pulvinatis, 1-1,5 mm. diam., atris, coriaceis, folii pilis persistentibus laxe echinulatis; loculis subglobosis, vix ostiolatis; ascis cylindraceis 100-140 \times 10-15 octosporis; sporidiis uniseriatis, continuis, hyalinis, ellipsoideis, utrinque acutis v. obtusis, 12-15 \times 7-8; paraphysibus filiformibus continuis, hyalinis, ascos æquantibus.

Hab. in foliis vivis Leeæ rubræ prope Gombong, Java (KOORDERS).

6. **Phyllachora Canarii** P. Henn., Hedwigia XLVII (1908) p. 254. — 4722
 Stromatibus amphigenis gregarie sparsis, rotundatis, planis, 1,5-2,5 mm. diam., atris, subverrucoso-ostiolatis; loculis immersis subglobosis plurimis; ascis clavatis vertice obtusiusculis, paraphysatis, 8-sporis, 50-80 \times 7-10; sporidiis oblique monostichis v. subdistichis, oblonge subfusoides, utrinque obtusis, guttulatis, hyalinis, 10-15 \times 3,5-4.

Hab. in foliis Canarii luzonici, Semerara ex insulis Philippin. (MERRILL).

7. **Phyllachora ?Aberiae** P. Henn., Engl. Bot. Jahrb. XLI (1908) 4723
 p. 272. — Stromatibus amphigenis, gregarie sparsis, pulvinatis rotundatis, atro-nitentibus, ca. 1 mm. diam.; ascis clavatis, obtusis, paraphysatis, c. 80-110 \times 10-12; sporidiis subdistichis, oblongis, hyalinis (immaturis).

Hab. in foliis *Aberia caffrae*, Uitenhage, Transvaal Africae (EVANS).

8. **Phyllachora peribebuyensis** Speg. — Syll. IX, pag. 1017 — var. 4724 *brachycarpa* Spegazz., Fungi Paul, Rev. Mus. La Plata t. XV, p. 25. — Stromatibus pulvinato-superficialibus medio substipitato-adfixis ut in *Coccoidea* P. Henn. Specimina quæ adsunt a typō recedunt sporidiis nonnihil brevioribus, 10-14 \times 5-7.

Hab. ad folia languida Melastomaceæ cujusdam prope Sao Paulo, Brasilia (USTERI).

9. **Phyllachora aggregatula** Syd., Ann. Mycol. VIII (1910) p. 38. — 4725 Stromatibus epiphyllis, in hypophyllo haud conspicuis, sine maculis, minutis, c. $\frac{1}{3}$ mm. diam., plerumque compluribus in greges minutis irregulares laxe dispositis, plerumque tantum 1-locularibus, atris, nitidis, rotundatis, hemisphærico-prominulatis; ascis clavatis, 40-55 \times 14-18, octosporis; sporidiis oblique mono-distichis, ellipsoideis, utrinque rotundatis, continuis, hyalinis, guttulatis, 10-14 \times 5-7.

Hab. in foliis vivis Melastomatis fuchi, Mount Marideles, Bataan, prov. Luzon in ins. Philippinensis (E. D. MERRILL).

10. **Phyllachora Petitmenginii** P. Maire, Ann. Myc. VI (1908) p. 150, 4726 fig. 6, tab. I, fig. 5. — Stromatibus epiphyllis, interdum totam folii crassitudinem occupantibus et in pagina inferiore præminentibus, in macula fulvida solitariis, nigris, nitentibus, levissimis, convexo-prominulatis, plerumque rotundatis vel ellipticis, 0,75-1,5 mm. diam.; loculis 2-6, subglobosis; ostiolis minute papillatis; ascis octosporis, clavatis vel subfusoideis, parte sporifera 80-110 \times 20-25, basi in pedicellum filiformem usque ad 60 μ . longum contractis; sporidiis distichis, oblongo-cylindraceis, hyalinis, levibus, utrinque rotundatis vel obtusis, 26-33 \times 7-8; paraphysibus filiformibus.

Hab. in foliis Myrtaceæ cujusdam, Garuja prope Santos, Brasilia. — *Phyll. Tonduzii* suaffinis.

11. **Phyllachora Lindmani** Starb., Ascom. Schwed. Chaco - Cordill. 4727 Exp., Arkiv f. Bot. Bd. V (1905) p. 13, fig. 9. — Stromatibus epiphyllis, ascigeris applanatim pulvinatis, irregulariter costato-rugosis vel tuberculatis, varie determinatis, undulatis vel lobatis, sæpe rhombiformibus, nitidulis, nigris, 3-10 mm. latis; stromatibus pycnidicis aliis circinantibus, aream sæpissime rhombiformem limitantibus, peripherice ramosis, crustaceis vel submembranaceis, aliis sed rarius solitariis elliptice vel varie limitatis, maculis fuscis, arescendo folii obscurioribus insidentibus; sporulis hyalinis, allan-

toideis, 5-9 \approx 1,5 tectis, griseo-farctis, astomis, tuberculatim prominentibus, forma varia, plerumque undulato-lobata determinatis, 400-500 μ . diam.; contextu coriaceo-carbonaceo, denique pulveraceo; ascis crasse cylindraceis, sursum obtusatis vel fusiformibus, utrinque attenuatis, 75-90 \approx 9-16; sporidiis octonis, valde varian-tibus, plerumque ellipsoideis, non raro elongatis et curvulis, con-globatis vel distichis, hyalinis, 16,5-25 \approx 6,5-9; paraphysibus filiformibus, numerosissimis.

Hab. in foliis Myrtaceæ, São Paulo, Cruz Alta, Brasilia (LINDMAN). — Quoad habitum *Rhytisma* in memoriam revocans, ob perithecia autem etiam jam evacuata non rimosim dehiscentia ad *Phyllachoram* ducenda est hæc distincta species. *P. rhytismoides* Cda, cui sec. specimen a Berkeley determinatum species hæc affinis, sec. figuram tamen apud Corda (Ic. fung. IV, 42 fig. 122) plane divergit.

12. **Phyllachora Ipirangæ** Speg., Fungi Paulist., Rev. Mus. La Plata 4728 t. XV, p. 24. — Maculis nullis; stromatibus planissimis, 1 mm. diam., vix prominulis eximie determinatis intus extusque nigris, levibus; loculis pusillis 100-120 μ . dirm., albo-nucleatis poro minutissimo ad epiphyllum perforatis; ascis apice subtruncato-rotundatis crassiusculeque tunicatis, medio v. parum infra subincrassatis, basim versus cuneato-attenuatis, in pedicellnm brevem productis 30-90 \approx 10-12, paraphysibus filiformibus longioribus obvallatis; sporidiis mono- v. distichis utrinque subacutiuscule rotundatis 15-16 \approx 8, primo grosse 1-2-guttulatis dein continuis, hyalinis.

Hab. ad folia languida Eugeniae cujusdam, Ipiranga Moça Brasilia (USTERI). — Species a cæteris in *Myrtaceis* vigentibus, cognitis, distinctissima.

13. **Phyllachora biguttulata** Theiss., Beih. Bot. Centralbl. Bd. XXVII 4729 (1910) Abt. II, p. 390. — Maculis brunneis irregularibus 3-6 mm. diam.; stromatibus opposito-amphigenis, 2-4 mm. diam. circulari-bus v. irregularibus, crassiuscule pulvinatis subnitentibus, papil-lis minutis sparse punctatis; loculis plane immersis, subglobosis; ascis cylindraceis, breviter stipitatis, p. sp. 50-65 \approx 8-10, supra ro-tundatis; sporidiis monostichis, hyalinis, continuis, rectis, ellipsoideis utrinque rotundatis, 10-12 \approx 5-5,5, guttulis 2 nitidis specie septatis.

Hab. in foliis vivis Campomanesiæ rhombæ in silva Sao Leopoldo Rio Grande do Sul Brasiliæ. — A *Phyllach. opposita* Henn. cui affinis, imprimis differt ascis et sporidiis.

14. **Phyllachora Myrrhinii** Theiss., Beih. Bot. Centralbl. Bd XXVII 4730 (1910) Abt. II, p. 390. — Stromatibus epiphyllis, in hypophyllo nullatenus visibilibus, maculis fuscis tenuissimis insidentibus, minutis, vix 1 mm. diam., raro æqualiter pulvinulatis et plurilocularibus (3-5), plerumque unilocularibus, appланato-conoideis, opacis, vertice subnitidis, papilla vix visibili nisi in plurilocularibus; ascis clavatis, pedicellatis, supra rotundatis, p. sp. 55-72 \approx 12-16, pedicello c. 12-15 μ . longo; sporidiis plerumque distichis, tunica mucosa tenuissima involutis, hyalinis, rectis, ellipsoideis, utrinque rotundatis, initio 2-guttatis et specie septatis, dein eguttatis homogeneis (intus non granulatis), 14-16 \approx 5 v. 12-14 \approx 6-6,5.
- Hab.* in foliis vivis *Myrrhinii rubriflori* in silvula Sao Leopoldo, Rio Grande do Sul Brasiliæ.
15. **Phyllachora Bakeriana** P. Henn., in Rehm Ascom. exs. fasc. 42, 4731 n. 1788; Ann. Mycol. VI (1908) p. 488. (Nomen nudum).
- Hab.* in *Cassia Hoffmannseggii*, Pará Brasilia (C. F. BAKER).
16. **Phyllachora luzonensis** P. Henn., Hedwigia XLVII (1908) p. 255. 4732 — Maculis effusis, fuscidulis; stromatibus amphidymis angulato-rotundatis, sparsis v. gregarie confluentibusque planis, atris; loculis immersis, numerosis, ostiolis hypophyllis, verrucoso-prominulis; ascis clavatis, vertice obtusis, paraphysatis, 8-sporis, 60-80 \approx 5-6; sporidiis ellipsoideis interdum ovoideis, hyalinis, 8-11 \approx 3,5-4.
- Hab.* in foliis *Milletiae Merrilli*, Luzon, Maragondong ins. Philippin. (MERRILL).
17. **Phyllachora Parkiae** P. Henn., Hedwigia XLVII (1908) p. 255. 4733 — Maculis rotundatis v. effusis, flavo-fuscidulis; stromatibus epiphyllis sparse gregariis interdum confluentibus, minutis, pulvinatis, atro-nitentibus, loculis paucis immersis, globulosis; ascis clavatis, apice obtuso-rotundatis, paraphysatis, 8-sporis, 45-70 \approx 8-12; sporidiis ellipsoideis, obtusis, oblique monostichis v. subdistichis, 2-guttulatis, hyalinis, 7-10 \approx 5-6.
- Hab.* in foliis Parkiae Roxburghii, Luzon, Prov. Bataan Lاما et Prov. Rizal, Montalban Ins. Philippin. (COPELAND, MERRILL).
18. **Phyllachora Pongamiae** P. Henn., Hedwigia XLVII (1908) p. 255. 4734 — Maculis minutis fuscidulis; stromatibus amphidymis, sparsis rotundatis, planis, atro-subnitentibus, 1-2 mm. diam; loculis immersis, numerosis, ostiolis subverrucoso-prominulis; ascis clavatis,

obtusis, 8-sporis, paraphysatis, 60-70 \times 8-10; sporidiis oblique monostichis interdum subdistichis, oblongis v. ovoideis, 10-13 \times 3,5-4.

Hab. in foliis *Pongamiae glabrae*, Mindanao, Daraò Ins. Phillipin. (COPELAND).

19. **Phyllachora paulensis** Rehm, Ascom. exsicc. n. 1747 (1907), Ann. 4735

Mycol. X (1907) p. 471. — Stromatibus in epiphylo haud mutato plerumque gregariis, sessilibus, irregulariter orbicularibus v. oblongis, 1-3 mm. diam., atris, convexis; loculis 10-12 innatis, globulosis, minutissime ostiolatis, interdum conoideo-protuberantibus, verrucosis, carbonaceis, intus atris; ascis clavatis 70-80 \times 15, octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, guttis oleosis repletis, strato tenui mucoso obductis, hyalinis, 10-12 \times 7-8, distichis; paraphysibus filiformibus 3 μ . cr.

Hab. in foliis *Leguminosæ* cujusdam, Araraquara prov. Sao Paulo, Brasilia (NOACK).

20. **Phyllachora Gœppertiae** Theiss., Ann. Mycol. VI (1908) p. 535. — 4736

Maculis minutis, subrotundis, lenticoloribus, dein exaridis v. brunnescentibus; stromatibus amphigenis, sparse gregariis, 0,5-1 mm. diam., atris, in epiphylo nitentibus, subconoideis, in hypophylo magis applanatis, subopacis, loculis paucis v. solitariis, ostiolo minuto prominulo; ascis cylindraceo-clavatis v. plus minus ventricosis, 80-100 \times 15-20; sporidiis globosis v. ellipsoideis, typice 12-14 \times 10, usque ad 18 μ . long., hyalinis continuis, intus granulosis.

Hab. in foliis vivis *Gœppertiae hirsutæ*, *Pheangellæ socia* P. Henn. intermixta, in Brasilia. — A *Phyll. socia*, *Ph. opposita* P. Henn. et *Ph. huallagensi* P. Henn. diversa.

21. **Phyllachora vernicosa** Spegazz., Fungi Paulist., Rev. Mus. La 4737

Plata t. XV, p. 26. — Stromatibus innatis determinatis repando-angulosis extus nigris ad epiphillum præcipue nitidissimis, intus albidis, majusculis 3-10 mm. diam.; loculis stromate intus albido immersis, ad hypophyllum minute ostiolato-pertusis, globosis 120-150 μ . diam.; ascis e fusoideo subclavulatis, apice obtuse rotundatis, deorsum cuneatis atque in pedicellum breviusculum attenuatis, 60-70 \times 12-14, paraphysibus filiformibus sat numerosis circumdati; sporidiis rectis v. oblique mono- v. di-stichis ellipsoideis 10-12 \times 5-6, grosse biguttulatis v. diblastibus, hyalinis.

Hab. ad folia viva coriacea arboris ignotæ (Lauraceæ?) cujus-dam in Horto botanico Sao Paulo, Brasilia (USTERI). — Var. *papulosa* Spegazz., l. c. — A typo recedit stromatibus minus vernicosis et ad hypophyllum, ob loculos prominulos, minute papu-

losis; ascis 50-60 \approx 16 et sporidiis 12-13 \approx 8-9 fere ut in typo. — Cum specie.

22. *Phyllachora parvula* Speg., Fungi Paulist., Rev. Mus. La Plata 4738 t. XV, p. 24. — Maculis nullis; stromatibus innatis, amphigenis minutis, 0,5-1,5 mm. diam., angulosis, ad hypophyllum 1-4 bulbosis, nigris, subopacis, sparsis v. rarius hinc inde gregariis; loculis astomis, hypophyllis, papuloso-prominulis, globoso-sublenticularibus 120-150 μ . diam., nucleo albo farctis; ascis apice truncato-rotundatis deorsum leniter incrassatulis, basi cuneatis brevissime pedicellatis, 85-100 \approx 10-14, plus minusve paraphysatis; sporidiis utrinque acutiuscule rotundatis, rectis, 16-18 \approx 5-6, levissimis, bispiculatis, hyalinis.

Hab. ad folia viva v. languida Lauraceæ? cujusdam, Morce perto de Sao Paulo, Brasilia (USTERI). — Species *Ph. sociae* P. Henn. affinis sed certe distincta præcipue defectu maculararam.

23. *Phyllachora Litseæ* Koord., Botan. Untersuch. (1907) pag. 181, 4739 fig. 14 (13-15). — Stromatibus, crustaceis, atris, innato-erumpentibus, pulvinatis, sparsis, 0,5-1,5 mm. diam., orbicularibus vel irregularibus, amphigenis; loculis immersis vix ostiolatis; ascis paraphysatis, cylindraceis, apice rotundatis, 100-110 \approx 10-11, 8-sporis; sporidiis ellipsoideis v. oblongis, utrinque rotundatis, continuis, hyalinis, 12-13 \approx 6-8; paraphysibus ascos æquantibus.

Hab. in foliis *Litseæ polyantha* prope Penunggalan, Java (KOORDEES).

24. *Phyllachora lepida* Syd., Ann. Mycol. VIII (1910) pag. 38. — 4740 Maculis nullis v. indistinctis flavidis; stromatibus epiphyllis, in hypophyllo etiam perspicuis, sparsis v. hinc inde subgregariis, rotundatis, $\frac{3}{4}$ -1 mm. diam., convexis, atris, nitidis, loculum tantum unicum majusculum ostiolo distincto rotundato minuto præditum includentibus; ascis cylindraceo-clavatis vel clavatis, 110-140 \approx 14-24, octosporis, paraphysatis; sporidiis oblongis, apice rotundatis, alterum finem versus plerumque leniter attenuatis sed obtusis, hyalinis, continuis, 24-32 \approx 7-9.

Hab. in foliis *Litseæ*, Dumaguete in Cuernos Mts. prov. Negros or. in ins. Negros, Philippin. (A. D. E. ELMER). — A *Phyll. Laurinarum* Rac. distincta.

25. *Phyllachora nectandricola* Speg., An. Mus. Nac. Buenos Aires 4741 t. XIX (1909) p. 418. — Stromatibus amphigenis sèpius lenticularibus, prominulis, 200-400 μ . diam., plerumque 1-locularibus, nitidulis; ascis subcylindraceis basi breviter crassiusculeque pedi-

cellatis, 100 \times 15-18, octosporis, a paraphysatis; sporidiis oblique mono- v. distichis, ellipsoideis utrinque acutis, 15 \times 7-9, eguttatis, hyalinis.

Hab. ad folia *Nectandrae* cujusdam in silva Robadal, Jujuy Argentina, America austr.

26. **Phyllachora Noackii** Syd., Ann. Mycol. V (1907) p. 359. — Stro- 4742 matibus epiphyllis, sine maculis, sparsis, rotundatis, $1\frac{1}{2}$ -1 mm. diam., convexis, atris, parum nitentibus, intus 1-plurilocularibus; ascis cylindraceis, ca. 85 \times 10; sporidiis octonis, oblique monostichis, ellipsoideis, continuis, hyalinis, utrinque rotundatis, intus minute granulosis, 12-15 \times 8-10.

Hab. in foliis Compositæ cujusdam (*Baccharidis?* spec.)
Prov. Sao Paulo, Sao Francisco dos Campos, Brasilia.

27. **Phyllachora conspicua** Ferd. et Winge, Botanisk Tidsskrift, XXIX 4743 (1908) p. 19, tab. II, fig. 8. — Stromatibus matrix innatis, primo plus minusve orbicularibus, minutis, discretis, mox autem dense aggregatis irregulariterque confluentibus v. crustam conspicuam, usque $1\frac{1}{2}$ cm. diam. formantibus, atris, initio epiphyllis, dein amphigenis, maculis orbicularibus flavis insidentibus easque pæne expletibus; loculis globosis, subglobosis v. applanatis, 150-180 μ . diam., mesophyllo immersis, ostiolo longo, non prominulo præditis; ascis cito diffluentibus, cylindraceis, cylindraceo-subfusoideis v. oblongo-ellipsoideis, apice obtuse rotundatis, postice pedicello brevi et tenui, 80-115 \times 15-18; sporidiis octonis, oblique monostichis v. subdistichis (in ascis subellipsoideis fere conglobatis), oblongo-ellipsoideis, utrinque rotundatis, 19-22 \times 6,5-8, continuis, hyalinis, oleoso-farctis; paraphysisibus filiformibus.

Hab. ad folia viva *Jacquiniae armillaris* ad Coral Bay in insula St. Jan Indiae occ. (RAUNKIAER).

28. **Phyllachora Jacquiniae** Rehm, in Kellerman Journ. of Mycol. 4744 XIV (1908) p. 4. — Stromatibus totum folium occupantibus, gregariis, in utraque pagina conspicuis, in epiphylllo magis prominentibus, in hypophyllo tenuissime valvatim cinctis, semiglobosis v. oblongis, atris, 0,3-0,6 mm. diam., loculos globulosos 1-3 minimos, haud perspicue ostiolatos includentibus; ascis cylindraceis, apice rotundatis, 100 \times 14-18, 8-sporis; sporidiis ellipsoideis, utrinque rotundatis, glabris, hyalinis, 1-locularibus, strato mucoso tenuissimo obtuctis, 14-15 \times 8-9, 1-raro 2-stichis; paraphysisibus filiformibus, septatis, 2-3 μ . cr.

Hab. ad folia *Jacquiniae aurantiacæ*, Jalapa Guatemala (KELLERMAN).

29. **Phyllachora Ardisiae** P. Henn., Hedwigia XLVII (1908) p. 254. 47

— Maculis fuscis, rotundatis v. confluentibus effusis, stromatibus epiphyllis, rotundato- v. oblongo-pulvinatis, atris, subnitentibus, loculis immersis numerosis vix ostiolatis; ascis clavatis, obtusis, paraphysatis, 8-sporis, 65-80 \approx 8-10; sporidiis oblongis, obtusis, nubilosus, hyalinis, 8-12 \approx 5-6.

Hab. in foliis *Ardisiae Candolleanæ*, Luzon Prov. Benguet, Daklanto Kabayan Ins. Philippin. (MERRILL).

30. **Phyllachora ambrosicola** Speg., Ann. Mus. Nac. Buenos Aires 47 t. XIX (1909) p. 414. — Maculis nullis v. obsoletissimis, pallenscentibus indeterminatis; stromatibus amphigenis innato-lenticularibus 200-300 μ . diam., 1-loclaribus, atris, nitidulis; ascis subcylindraceis saepius subtorulosis basi breviter crasseque stipitatis, 80-120 \approx 10-16, non v. parce paraphysatis; sporidiis oblique vel transverse monostichis, utrinque obtusissimis, 12-14 \approx 8-9, medio non v. grosse 1-2-guttulatis, hyalinis.

Hab. ad folia viva *Ambrosiae tenuifoliae*, Marmol prope Buenos Aires Argentina Amer. austr. — An *Ph. Ambrosiae* (B. et C.) Sacc.? Species ad *Physalosporam* notis plurimis vergit.

31. **Phyllachora Macarangæ** P. Henn., Hedwigia XLVII (1908) p. 254. 474

— Maculis angulato rotundatis v. effusis, fuscis; stromatibus epiphyllis gregariis, rotundato- vel oblongo-angulatis, pulvinatis, atro-subnitentibus; loculis immersis, sobglobosis, ostiolis, subpunctiformibus; ascis clavatis, vertice obtusis, 8-sporis, 50-70 \approx 10-14; paraphysibus filiformibus, hyalinis guttulatis, 2 μ . crassis; sporidiis monostichis v. distichis, oblongis, obtusis, hyalinis, 10-15 \approx 5-6.

Hab. in foliis Macarangæ, Balut Ins. Philippin. (MERRILL).

32. **Phyllachora Randiae** Rehm — Syll. XIV p. 667 — subsp. *Aculeata* Ferd. et Winge, Bot. Tidsskr. XXIX (1908) p. 19; Vidensk. Meddel. fra den naturh. Foren. Kiobenhavn (1908) p. 142, t. IV, fig. 2. — Stromatibus fere solum epiphyllis, innatis, planiusculis, atris, nitidis, nunc minutis, nunc majoribus, ad 3 mm. diam., pustulas loculigeras $1\frac{1}{2}$ - $3\frac{1}{4}$ mm. diam., vario secundum magnitudinem stromatis numero (max. 20-30), gerentibus; loculis in pustula singula 1-2, in epidermide vix mutata insidentibus, superne strato nigerrimo subcuticulari limitatis; ascis cylindraceo-obovoideis, clavatis, ovoideis, omnino versiformibus, 40-60 \approx 15-20; sporidiis oblongo-ellipsoideis, 12-13 \approx 7-8.

Hab. ad folia viva Randiæ aculeatæ in insula St. Jan Indiæ occidentalis (F. BOERGESEN). — Adsunt pycnidia ad typum *Placosphaerice* formata, nunc stromatibus minutis propriis immersa, nunc peritheciis intermixta, sporulas bacillares, subrectas, continuas, hyalinæ, $5-8 \times \frac{1}{2}-\frac{3}{4}$ foventia.

33. **Phyllachora phyllanthophila** P. Henn. — Syll. XVII, p. 834 — 4749
 var. *egregia* Rehm, Ascom. exsicc. fasc. 46, n. 1895, Ann. Mycol. (1907) p. 530 et (1910) p. 302. — Distinguitur stromatibus majoribus plerumque oblongis subobtusis, usque ad 4 mm. long., 2-3 mm. latis; loculis innatis 20-35, plus minus prominentibus, poro perspicuo pertusis, monostichis; sporidiis 12-13 \times 7-9, strato mucoso obvolutis, distichis; ascis clavatis, 50-60 \times 20.

Hab. in pagina sup. foliorum ? *Phyllanthi*, São Leopoldo, Rio Grande do Sul Brasiliæ (RICK).

34. **Phyllachora globispora** Speg., An. Mus. Nac. Buenos Aires t. XIX 4750 (1909) p. 418. — Stromatibus amphigenis sed saepius epiphyllis innatis, lenticularibus, 450-750 μ . diam., atris, nitentibus, loculis 1-3 subglobosis 200-250 μ . diam.; ascis cylindraceis breviter pedicellatis 75-100 \times 10-12, parce paraphysatis; sporidiis saepius germinatis, monostichis globosis, 10 μ . d., levibus, grosse 1-guttulatis.

Hab. ad folia Crotonis cujusdam in silvis prope Bompland, Misiones, Argentina America austr. — Specie ab omnibus in *Euphorbiaceis* et præcipue in *Crotonibus* vigentibus longissime recedens.

35. **Phyllachora Blanquillo** Speg., An. Mus. Nac. Buenos Aires t. XIX 4751 (1909) p. 414. — Maculis amphigenis fuscescentibus, irregularibus; stromatibus lenticularibus 150-200 μ . diam., innato-prominulis nitidulis nigris; loculis saepius in quoque stromate solitariis 120-150 μ . diam.; ascis cylindraceo-fusoideis basi breviter crasseque pedicellatis 60-75 \times 10-15, parcissime paraphysatis, octosporis; sporidiis ex elliptico subovoideis, oblique v. transverse monostichis, utrinque obtusis 10-14 \times 7-8, eguttulatis, hyalinis.

Hab. ad folia viva Excœcariae marginatae prope Concepcion del Uruguay Amer. austr. (J. M. HUERGO).

36. **Phyllachora Fici-obscuræ** Koord., Botan. Untersuch., (1907) p. 181. 4752 — Stromatibus crustaceis, atris, discretis, sparsis, pulvinatis, orbicularibus, amphigenis, imprimis epiphyllis, innatis 0,3-0,8 mm. diam.; loculis immersis vix ostiolatis; ascis cylindraceis, paraphysatis, octosporis, apice rotundatis 88-90 \times 10-12; sporidiis globosis, continuis, hyalinis 10-14 \times 10-11, uniseriatis.

Hab. in foliis vivis Fici obscuræ prope Purworedjo Java (KOORDERS).

37. **Phyllachora Fici-minahassæ** P. Henn., Hedwigia XLVII (1908) 4753 p. 254. — Maculis nullis; stromatibus epiphyllis sparsis v. gregarie confluentibus, atro-carbonaceis, opacis v. subnitentibus angulato-pulvinatis; ascis clavatis, obtusis, 8-sporis, paraphysatis, 45-60 \times 10-16; sporidiis oblongis utrinque obtusis, intus guttulatis, hyalinis, 13-16 \times 5-6,5.

Hab. in foliis Fici minahassæ, Balut Island Ins. Philippin. (MERRILL).

38. **Phyllachora Fici-fulvæ** Koord., Botan. Untersuch., (1907) p. 182. 4754 — Stromatibus crustaceis, epiphyllis, atris innato-erumpentibus, 1-1,5 mm. diam., sparsis, circularibus, pulvinatis; ascis cylindraceis 60-80 \times 8-11 apice rotundatis; sporidiis continuis, hyalinis, globosis v. ellipsoideis et utrinque rotundatis, 10-11,5 \times 8-11, uniseriatis.

Hab. in foliis Fici fulvæ prope Sapuran Java (KOORDERS).

39. **Phyllachora Fici-albæ** Koord., Botan. Untersuch. (1907) p. 183. 4755 — Stromatibus crustaceis, atris, epiphyllis, innatis, haud erumpentibus, discretis, pulvinatis, suborbicularibus v. irregularibus, 2-4 mm. diam.; loculis numerosis vix ostiolatis; ascis cylindraceis, paraphysatis, 70-75 \times 10-10,5 apice haud incrassatis, octosporis; sporidiis uniseriatis, continuis, hyalinis, globosis v. ellipsoideo-globosis, 8-10 \times 8-9.

Hab. in foliis vivis Fici albæ in M. Sendoro prope Kledung Java (KOORDERS).

40. **Phyllachora Devriesei** Koord., Botan. Untersuch. (1907) p. 181, 4756 fig. 14 (7-12). — Stromatibus crustaceis, atris, innatis, 0,8-1,2 mm. diam., sparsis, suborbicularibus, pulvinatis, hypophyllis; loculis immersis, minute ostiolatis; ascis cylindraceis, paraphysatis, 8-sporis, apice rotundatis, 60-80 \times 10-12; sporidiis continuis, hyalinis, subglobosis vel ellipsoideis et utrinque rotundatis, 10-12 \times 7-8,5; paraphysibus filiformibus, 100 \times 3-4, hyalinis.

Hab. in foliis Fici leucantatomæ prope Sadang prov. Kedu Java (KOORDERS).

41. **Phyllachora amaniensis** P. Henn., Engl. Jahrb. XXXVIII (1905) 4757 p. 113. — Stromatibus in maculis fuscidulis sparse gregariis, hypophyllis, planis, atris, ostiolato-verrucosis, c. 1-1,5 mm. diam.; loculis immersis, subglobosis v. ovoideis; ascis cylindraceis apice rotundato-obtusis, octosporis, 100-130 \times 7-10; paraphysibus filifor-

mibus, hyalinis c. 2 μ . cr.; sporidiis oblique monostichis, ellipsoideis, utrinque rotundatis, interdum inæquilateralibus, intus granulatis, hyalinis, continuis, 10-14 \times 6-7.

Hab. in foliis Fici spec., Ost-Usambara Africæ centr. (ZIMMERMAN).

42. **Phyllachora Merrillii** Ricker, A List Philipp. Fungi in Philipp. 4758 Journ. of Science, I, Suppl. IV (1906) pag. 280. — Stromatibus gregariis, confluentibus, epiphyllis, convexis, nigris, nitidis, 6 mm. diam., in maculis flavidis insidentibus; ascis cylindraceo-clavatis, 56-65 \times 14-20, breviter stipitatis, octosporis; sporidiis oblique uni-seriatis vel saepe partim biseriatis vel imbricatis, ellipsoideis, uniseptatis, primum hyalinis, dein brunneolis, 8-12 \times 4-6; paraphysibus minutis, filiformibus.

Hab. in foliis Fici, Mindoro, Bulalacao in ins. Philippinens. (MERRILL).

43. **Phyllachora dendroidea** P. Henn., in Rehm Ascom. Exsicc. fasc. 42 4759 (1908) n. 1787; Ann. Mycol. VI (1908) p. 488. (Nomen nudum).

Hab. in Fico sp. Parà Brasiliæ (C. F. BAKER).

44. **Phyllachora circinata** Syd., Ann. Mycol. VIII (1910) p. 38. — 4760 Stromatibus, sine maculis, plerumque epiphyllis, rarius etiam hypphyllis, in greges orbicularis $\frac{1}{2}$ -1 cm. latos amœne circinatim dispositis, minutis, rotundatis, 0,5-1 mm. diam., atris, loculis pluribus minutis praeditis; ascis clavatis, 42-60 \times 12-15, octosporis; sporidiis irregulariter distichis, oblongis, utrinque obtusis, continuis, hyalinis, 14-18 \times 5-6.

Hab. in foliis Fici sp. (cum foliis magnis glabris integris), Prov. of Cagayan Luzon ins. Philippinenses (H. M. CURRAN).

45. **Phyllachora simplex** Starb., Ascom. Schwed. Chaco-Cordill. Exp., 4761 Arkiv f. Bot. Bd. V (1905) p. 14, fig. 10. — Stromatibus minutissimis, non maculiformibus, ad utramque paginam foliis dispersis, solitariis et uni-bilocularibus, rarissime confluentibus, multilocularibus, lenticulariter perithecioideis, nitidiusculis, nigris, $\frac{1}{2}$ -1 mm. diam.; pycnidii epiphyllis, numerosis, dense sparsis, interdum aggregatis vel nonnullis confertulis, ostiolo pertuso, applato erumpentibus, circa 150 μ . diam.; sporulis bacillaribus, utrinque acutiusculis, curvatis, interdum genuflexis, 17,7-21,5 \times 1,5-2; ascis octosporis, valde variis, plerumque fusoideis, medio latissimis, interdum obovatis vel fere cylindraceo-clavatis, superne in-crassatis, 90-115 \times 19-24 (p. sp.); sporidiis conglobatis, ellipsoideis, utrinque rotundatis vel fere truncatulis, medio interdum incurva-

tis, vel ovato-piriformibus, inferne acutatis vel late ellipsoideis, fere sphærioideis, 15,2 \times 10 vel 19-25 \times 7-8; paraphysibus hyalinis filiformibus, ascis superantibus.

Hab. in foliis *Coccolobæ*, Asuncion Paraguay (MALME). — Species ascis sporidiisque valde variantibus distincta videtur, ad *Physalosporam* nonnihil accedens, sed a *Phys.* *Coccolobæ* Rehm plane divergens.

46. **Phyllachora Coccolobæ** Speg., An. Mus. Nac. Buenos Aires t. XIX 4762 (1909) p. 416. — Stromatibus innatis nigris parvis repando-angulosis gregariis utrinque manifestis sed hypophyllis, plurilocularibus, loculis subglobosis 100-120 μ . diam.; ascis primo cylindraceis dein torulosis basi breviter crasseque pedicellatis, 70-80 \times 10-18, octosporis, paraphysatis; sporidiis ellipsoideis, saepius transverse monostichis utrinque obtusiusculis 13-14 \times 6, hyalinis.

Hab. ad folia viva *Coccolobæ* cujusdam in silvis prope Formosa, Argentina America austr.

47. **Phyllachora vilis** Starb., Ascom. Schwed. Chaco-Cordill. Exped., 4763 Arkiv f. Bot. Bd. V (1905) p. 14. — Stromatibus minutissimis, secundum folium filiforme sparsis, interdum confluentibus, elongatis, 0,2-0,3 mm. longis, vix 0,1 mm. latis; loculis paucis, vix prominulis, ostiolo pertusis, minimis; ascis cylindraceis, vel attenuato-fusiformibus, sursum obtuse rotundatis, vix pedicellatis, 50-68 \times 10-12; sporidiis octonis, inordinatim distichis, semper utrinque acutatis, plerumque clavulatis, inferne longe attenuatis, interdum fusoideis, e medio lato mox acutatis, guttulatis, 18-20 \times 5; paraphysibus filiformibus, robustis, flexuosis, ascis obvallantibus.

Hab. in foliis *Bulbostylis capillaris*, Minao Geraes, S. Joao del Rey (LINDMAN). — *P. oxysporae* Starb. affinis.

48. **Phyllachora melanoplaca** (Desm.) Sacc. — Syl. II, p. 607. — 4764 fm. *Veratri* Rehm, Ascom. Exsicc. fasc. 37, n. 1661, Ann. Mycol. IV (1906) p. 407.

Hab. in foliis *Veratri nigri*, prope Konstanzer Hütte, Arlberg Tyrolia, 1770 m. alt.

49. **Phyllachora Pappiana** Bace., Funghi Eritr., Ann. Bot. IV (1906) 4765 pag. 275. — Stromatibus amphigenis, minutis, subrotundis, atris, diu epidermide tectis; loculis paucis, 200 μ . latis; ascis paraphysatis 90 \times 10; sporidiis hyalinis, continuis, 22 \times 9.

Hab. in foliis *Sansevieræ Ehrenbergianæ* in montibus Arbaroba a Mahdet, 2200 m. alt. in *Erythraea* (PAPP).

- 50 **Phyllachora cyperina** P. Henn., Fl. du Bas- et Moy.-Congo, in 4766

Ann. Mus. du Congo v. II, fasc. II (1907) p. 98. — Maculis fuscis oblongis; stromatibus amphigenis, oblongis, atris nitentibus, loculis immersis rotundato-angulatis c. 50-100 μ . cr.; ascis longe fusoideis, subacutiusculis, 8-sporis, 60-80 \times 6; sporidiis oblique monostichis vel subdistichis, lanceolato-fusoideis, hyalinis, 10-14 \times 3,5-4,5.

Hab. in foliis Cyperaceæ cujusdam, Congo Afric. trop. (VANDERYST).

51. **Phyllachora fimbristylicola** Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 417. — Stromatibus innatis nigris nitidulis, linearibus v. elliptico-linearibus, 0,5-1 mm. long., 0,2-0,3 mm. latis; loculis confertis 150 μ . diam.; ascis e cylindraceo subfusoideis, basi breviter pedicellatis, 55-60 \times 8-10, paraphysatis octosporis; sporidiis distichis subfusoideis utrinque acutis 14-20 \times 4-6, hyalinis.

Hab. ad folia culmosque Fimbristylidis capillaris prope Rufino et prope Corrientes, Argentina Amer. austr. — A *Phyll. Fimbristylidis* (B et Br.) Sacc. ascis non clavatis sporidiisque non monostichis nec curvulis atque paullo crassioribus recedens; *Ph. gracillima* Speg. etiam peraffinis sed certe distincta.

52. **Phyllachora Sacchari-egyptiaci** Br. et Cavr., Funghi parass. ess. n. 416 cum iconibus. — Stromatibus oblongis, seriatim dispositis, confluentibusque, diu epidermide rubefacta tactis; loculis uniseratis, stromate dense immersis, mutua pressione e globoso irregulibus; ascis cylindraceis, modice pedicellatis, 145-155 \times 12-14, paraphysibus filiformibus, longioribus obvallatis, octosporis; sporidiis oblique monostichis ellipsoideis v. ovoideis, dilute flavescentibus, 19-20 \times 7,5-9,5, episporio levi.

Hab. in foliis Sacchari egypitiaci in arenosis salsis Siciliæ et in horto botanico, Catania (CAVARA).

53. **Phyllachora melicicola** Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 417. — Stromatibus amphigenis ellipticis, nigris non v. vix prominulis 1-2 mm. long., 0,5-0,8 mm. lat.; loculis numerosis subglobosis 150-180 μ . diam.; ascis linearibus modice pedicellatis, 120-130 \times 10, octosporis, paraphysibus filiformibus commixtis; sporidiis oblique monostichis ellipsoideis, utrinque obtusissime rotundatis, 14-16 \times 8, non v. grosse 1-guttulatis, hyalinis.

Hab. ad folia Melicæ violacea prope Jujuy, Argentina America austr.

54. **Phyllachora Eriochloæ** Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 416. — Stromatibus matrice tota pallescente insidenti-

bus, lenticularibus vel confluendo linearibus 250-1000 \vee 200-250, 1-3-loclaribus, loculis totis immersis 100-120 μ . diam.; ascis linearibus basi cuneatis breviterque pedicellatis, 70-80 \vee 10-12, parce paraphysatis octosporis; sporidiis oblique monostichis, ellipsoideo-ovovatis, 14-15 \vee 7, hyalinis.

Hab. ad folia viva *Eriochloæ annulatae* prope Santiago del Estero Argentina Amer. austr.

55. **Phyllachora boutelouicola** Spegazz., An. Mus. Nac. Buenos Aires 4771 t. XIX (1909) pag. 415. — Stromatibus amphigenis subellipticis opacis, 1-5 mm. long., 1-1,25 mm. lat.; loculis immersis globulosis 120-150 μ . diam., constipatis albo-faretis; ascis subcylindraceis basi modice attenuato-pedicellatis 80-90 \vee 12-15, paraphysatis, octosporis; sporidiis oblique v. transverse monostichis, ovoideis, 12-13 \vee 6, eguttulatis hyalinis.

Hab. ad folia viva *Boutelouæ lophostachyæ* prope San Luis, Argentina Amer. austr.

56. **Phyllachora cenchricola** Spegazz., An. Mus. Nac. Buenos Aires 4772 t. XIX (1909) p. 415. — Maculis nullis sed folio omnino pallidente; stromatibus epiphyllis innatis, minutis opacis, sublinearibus, 0,5-1,5 mm. long., 0,25-0,40 mm. lat., non nitentibus; loculis 1-8 in quoque stromate 100-220 μ . diam.; ascis subfusoideis basi brevissime crassiusculeque pedicellatis 80-90 \vee 12-16, paraphysibus filiformibus densis cinctis, octosporis; sporidiis late ellipsoideis utrinque rotundatis mono- v. di-stichis, 15 \vee 10, eguttulatis.

Hab. ad folia viva *Cenchræ myosuroidis* prope Metan, Salta, Argentina Amer. austr.

57. **Phyllachora chloridicola** Spegazz., An. Mus. Nac. Buenos Aires 4773 t. XIX (1909) p. 416. — Stromatibus innatis suborbicularibus 1-2 mm. diam., nitidulis, plurilocularibus, loculis 120-150 μ . diam.; ascis linearibus basi breviter pedicellatis, 85-100 \vee 8-10, paraphysatis, octosporis; sporidiis ellipsoideis monostichis plus minusve obtusatis, 10-12 \vee 5-7 v. 14-16 \vee 7-8, hyalinis.

Hab. ad folia viva *Chloridis radiatae*, La Rioja, Chlor. distichophyllæ, Cordoba, Argentina Amer. austr.

58. **Phyllachora Urvilleana** Spegazz., An. Mus. Nac. Buenos Aires 4774 t. XIX (1909) p. 419. — Stromatibus innatis hypophyllis fuscis numerosissimis sublinearibus confluentibus, loculis 120-150 μ . diam. ostiole lato, 20 μ . diam., præditis; ascis obclavatulis basi lenissime crassiusculeque pedicellatis 60-70 \vee 7-8, octosporis, parcissime pa-

raphysatis; sporidiis subfusoideis utrinque acutis, 18-20 \times 4, oblique distichis, eguttulatis, hyalinis.

Hab. ad folia *Panici Urvilleani*, Fuente Argentina prope Bahia Blanca, Argentina Amer. austr.

59. **Phyllachora bokensis** P. Henn., in Fl. du Bas- et Moy.-Congo, 4775 v. II, fasc. III (1908) p. 226. — Maculis amphigenis, oblongo-effusis, fuscidulis v. violascentibus; stromatibus amphigenis oblongis striiformiter confluentibus, atro-opacis; loculis subsphæroideis, punctoideo-ostiolatis; ascis clavatis, vertice obtusis, 8-sporis, paraphysatis, 80-110 \times 16-20; sporidiis oblique monostichis vel subdistichis, ellipsoideis v. ovoideis, obtusis, intus granulosis, hyalinis, 15-20 \times 9-13.

Hab. in foliis *Panici*, Boko Sainte-Barbe Congo (VANDERYST).

60. **Phyllachora heterospora** P. Henn., Etat indép. du Congo Mission E. Laurent fasc. IV (1907) p. 362. — Maculis gregariis flavidis v. obsoletis; stromatibus amphigenis pulvinato-oblongis saepè confluentibus, atro-nitentibus; loculis immersis globulosis; ascis fusoideo-clavatis, obtusis v. acutiusculis, octosporis, paraphysatis, 50-80 \times 10-15; sporidiis distichis, interdum submonostichis, versiformibus, ellipsoideis, ovoideis v. fusoideis, hyalinis, 10-18 \times 6-8.

Hab. in foliis *Panici maximi* inter Léopoldville et Kwamouth, Africa æquator.

61. **Phyllachora acuminata** Starb., Ascom. Schwed. Chaco-Cordill. 4777 Exp., Arkiv f. Bot. Bd. V (1905) p. 11, fig. 8 a-b. — Stromatibus epidermide nigrificata tectis, epiphyllis vel amphigenis, gregetim sparsis, interdum confluentibus, oblongatis, varie determinatis, applanatim depressis; loculis non prominulis, lenticularibus, fere confluentibus; ascis octosporis, cylindraceis, saepè curvatis, deorsum paullo angustioribus in pedicellum sensim attenuatis, sursum obtusis, fere deciduis, 100-140 \times 9-10; sporidiis recte, interdum oblique monostichis, oviformibus, sursum rotundatis, deorsum cuspidato-acuminatis, hyalinis, 14-17,7 \times 5-6,5; paraphysibus hyalinis, fere simplicibus, filiformibus, elegantissime flexuosis; stromatibus minoribus pycnidicis ellipticis, 1/4-1 mm. longis, dimidio latit; sporulis clavulatim acicularibus, saepissime curvulis, 12-20 \times 1.

Hab. in foliis vivis *Paspali*, Salta, Argentina. — *P. oxyospora* Starb. affinis; et ab illa et a *P. Cyperi* v. *Donacis* Berl. et Sacc. sporidiis latioribus, cuspidatis differt.

62. **Phyllachora Oplismeni** Syd., Ann. Mycol. V (1907) pag. 339. — 4778 Stromatibus amphigenis, irregulariter distributis, subinde seriatim

dispositis et parum confluentibus, sæpe autem per tota folia æque sparsis, minutis, punctiformibus, rotundatis v. oblongis, ca $1\frac{1}{2}$ mm. longis, atris, parum nitentibus, 1- vel pauci-locularibus; ascis cylindraceis, breviter stipitatis, octosporis, 38-45 \times 6-11; sporidiis oblique monostichis v. subdistichis, continuis, ovatis, utrinque obtusis, hyalinis vel subhyalinis, 9-11 \times 4 $\frac{1}{2}$ -6.

Hab. in foliis *Oplismeni undulatifolii*, Tokyo Japoniae (N. NAMBU). — Probabiliter *Phyll. Arthraxonis* proxima.

63. **Phyllachora Sorghi** v. Höhn., Fragm. z. Mykol. VII (1909) in 4779

Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 844 et in Rehm Ascom. exs. n. 1841, Ann. Mycol. VII (1909) p. 403 (nomen nudum). — Stromatibus amphigenis utrinque visilibus, sine maculis v. in maculis pallide flavidis rubro-sanguineo marginatis insidentibus, plerumque longitudinaliter seriatis, elongatis, 0,5-1 mm. latis, sæpe confluentibus et usque ad 1-2 cm. longis, carbonaceis, nitidulis, undulato-asperulis; loculis longitudinaliter seriatis, depresso distincte limitatis, 150-830 μ . long., 100-150 μ . cr.; ostiolis distinctis, rotundatis 40-50 μ . latis; paraphysibus numerosis, late cylindraceis, 6-7 μ . latis, mucosis; ascis clavatis, sessilibus vel breviter stipitatis, octosporis, 90-130 \times 13-20; sporidiis mono- v. distichis, hyalinis, tenuiter tunicatis, contentu granuloſo, unilocularibus, utrinque rotundatis, ellipsoideo-ovoideis, 18-24 \times 12.

Hab. in foliis *Sorghii vulgaris* in Horto bot. Buitenzorg in ins. Java. — *Phyll. Sacchari* P. Henn. affinis.

64. **Phyllachora paspalicola** P. Henn., in Rehm Ascomyc. Exsicc. 4780 fasc. 42 (1908) n. 1785; Ann. Mycol. VI (1908) p. 488. (Nomen nudum).

Hab. in *Paspalo* sp., Pará Brasiliæ (C. F. BAKER).

65. **Phyllachora Eleusines** P. Henn., in Fl. du Bas- et Moy.-Congo, 4781 Ann. Mus. du Congo v. II, fasc. II (1907) p. 98. — Stromatibus amphigenis, sparse gregariis, rotundato- vel oblongo-pulvinatis, atris, nitentibus, c. 0,5-0,7 mm. cr.; loculis immersis, paucis; ascis cylindraceis, obtusis, 8-sporis, 65-80 \times 6-7; paraphysibus filiformibus c. 1,5 μ . cr.; sporidiis oblique monostichis, ovoideis vel ellipsoideo-fusiformibus, hyalinis, 8-10 \times 6-7.

Hab. in foliis *Eleusines indicæ*, Kisantu Congo (VAN DERYST).

66. **Phyllachora Usteriana** Speg., Fungi Paulist., Rev. Mus. La Plata 4782 t. XV (1908) p. 25, fig. F. — Maculis nullis; stromatibus parenchymate innatis epidermide adnato-tectis, vix prominulis, densiu-

scule subcircinantibus, pusillis 150-250 μ . diam., numquam confluentibus, loculis in quoque stromate solitariis, subglobosis 80-100 μ . diam., nucleo albo farctis; ascis utrinque attenuatis, apice acutiuscula rotundatis aparaphysatis v. parce pseudoparaphysatis, pedicello brevi suffultis, 60 \times 12-15, octosporis; sporidiis fusoideis rectis v. leniter inaequilateralibus, utrinque nodulo subgloboso ornatis 25-30 \times 5-6, continuis v. obsolete diblastis, hyalinis.

Hab. ad folia coriacea arboris ignotæ cujusdam prope Ipiranga Brasilia (USTERI).

67. **Phyllachora grammica** P. Henn., in Fl. du Bas- et Moy.-Congo, 4783 Ann. Mus. du Congo v. II, fasc. II (1907) pag. 98. — Maculis sparsis rotundato-angulatis, flavis; stromatibus amphigenis nervos sequentibus, linearibus ramosis, atris, subnitentibus; loculis immersis, subsphaeroideis; ascis cylindraceo-clavatis, obtusis, 8-sporis, 60-70 \times 8-10; sporidiis oblique monostichis v. subdistichis, oblongis v. ovoideis, utrinque rotundatis, hyalinis, 1-3-guttulatis, 8-12 \times 6-7.

Hab. in foliis indeterminatis, Kisantu Congo Africæ tropic. (VANDERYST).

EURYACHORA Fuck. — Syll. II p. 625, IX p. 1030, XIV p. 674, XVI p. 624, XVII p. 527.

1. **Euryachora duplicata** Rehm, Ann. Mycol. VII (1909) p. 538 — 4784
Stromatibus matrici innatis ab eaque denique denigrata tectis, convexulis, linearibus, ad apices rotundatis, 1-2 cm. longis, 2-4 mm. latis, intus atris, carbonaceis; loculis plurimis globulosis monostiche innatis, papillulis minutissimis conspicuis; ascis cylindraceis c. 100 \times 15, octosporis; sporidiis ellipsoideis, unicellularibus, guttis duabus magnis oleosis instructis, hyalinis, 15-17 \times 8-9, monostichis; paraphysibus filiformibus.

Hab. ad ramulos Serjaniæ, Sao Leopoldo Rio Grande do Sul Brasiliæ (THEISSEN S. J.). — Socia adest *Phyllachora duplex*.

Sect. 3. Phæosporæ.

AUERSWALDIA Sacc. — Syll. II p. 626 et cfr. p. 461, IX p. 1031, XI p. 374, XIV p. 675, XVI p. 625, XVII p. 841.

1. **Auerswaldia Vignæ** P. Henn., Engl. Jahrb. XXXVIII (1905) p. 113. 4785
— Maculis rotundato-angulatis, gregarie sparsis, roseolo-fuscidulis; stromatibus epiphyllis cæpitosis, rotundato-pulvinatis, atro-niten-

tibus, 250-300 μ . diam., 1-paucilocularibus; ascis clavatis vertice obtuse rotundatis, 50-80 \times 8-12, octosporis; paraphysibus filiformibus, hyalinis, c. 2 μ . cr.; sporidiis oblique monostichis v. subdistichis, ovoideis v. subglobosis, primo hyalinis dein roseo-fuscidulis, 7-9 \times 6-8.

Hab. in foliis *Vignæ vexillatae*, Amani Ost-Usambara (ZIMMERMAN). — A typo generis stromatibus minutis recedit.

2. *Auerswaldia Dalbergiae* P. Henn., Engl. Jahrb. XXXVIII (1905) 4786 p. 114. — Maculis flavidо-fuscidulis, rotundato-angulatis v. effusis; stromatibus epiphyllis cæspitosis, pulvinato-erumpentibus, atro-nitentibus, punctulatis, c. 180-220 μ . loculis paucis immersis; ascis clavatis, apice rotundatis, 4- (raro) 8-sporis, paraphysatis, 40-50 \times 7-10; sporidiis oblique monostichis v. subdistichis, ellipsoideis v. subovoideis; intus granulatis, olivaceo-fuscidulis, 8-11 \times 5-6.

Hab. in foliis *Dalbergiae lactea*, Marangu Kilimandscharo Africæ centr. (G. VOLKENS).

3. *Auerswaldia Derridis* P. Henn., Hedwigia XLVII (1908) p. 255. 4787 — Maculis rotundatis v. effusis brunneis; stromatibus amphidymis gregariis sæpe confluentibus, rotundatis, planis, atris, opacis, loculis immersis, subglobosis; ascis cylindraceis, obtusis, 8-sporis, p. sporif. 30-35 \times 5; sporidiis oblique monostichis, ellipsoideis, flavidо-olivascentibus, 5-6 \times 4-5.

Hab. in foliis *Derridis*, Mindoro, Alag River ins. Philippin. (MERRILL).

4. *Auerswaldia Hirtellæ* P. Henn., Hedwigia XLVII (1908) p. 268. 4788 — Maculis flavo-fuscis rotundatis; stromatibus epiphyllis sparsis, erumpenti-superficialibus, pulvinato-subglobosis, rugosis, subcarbonaceis, atro-fuscis, rimosis; loculis immersis; ascis longe clavatis, vertice obtuso-rotundatis, 8-sporis, 100-140 μ . longis, parte spor. 70-100 \times 10-13; sporidiis ellipsoideis v. subfuscoides, utrinque obtusis, oblique monostichis v. subdistichis, guttulatis, fuscis, 14-20 \times 8-10; paraphysibus hyalinis.

Hab. in foliis *Hirtellæ*, Serra do Sincora, Bahia Brasil.

5. *Auerswaldia Copelandi* Syd., Ann. Mycol. IV (1906) p. 343. — 4789 Stromatibus amphigenis, omnino immersis, phyllachoroideis, forma et magnitudine valde ludentibus, 2-15 mm. latis, nervis non limitatis sed eos transverse superantibus, atris, nitidis, carbonaceis; loculis in quoque stromate 1 vel pluribus (usque 20); ascis forma variabilibus, cylindraceis vel clavatis vel saccatis, ca. 70-90 \times 10-28; sporidiis octonis (an semper ?), monostichis vel etiam irregulariter

distichis, subglobosis vel late ellipsoideis, continuis, ex hyalino brunneolis, 14-19 \approx 12-15.

Hab. in foliis *Caryotæ*, in regione Zamboanga, Mindanao, ins. Philippin. (E. B. COPELAND).

6. *Auerswaldia Merrillii* P. Henn., Hedwigia XLVII (1908) p. 255. — 4790
Maculis effusis, fuscidulis; stromatibus amphidymis, sparse gregariis, rotundatis, atro nitentibus, planiusculis, 1-1,5 mm. diam.; loculis immersis subglobulosis; ascis clavatis, obtusis, paraphysatis, 8-sporis, 140-180 \approx 10-13; sporidiis longe fusoideis, utrinque subacutis v. subpapillato-hyalinis, guttulatis, subfuligineis, 30-42 \approx 8-10.

Hab. in foliis *Freycinetiae*, Mindoro, Mt. Halcon, ins. Philippin. (MERRILL).

SPHÆRODOTHIS Shear, Mycologia v. I (1909) p. 162, *Auerswaldiae* subg. *Sphærodothis* Sacc. et Syd. — Syll. XVI, p. 625.

1. *Sphærodothis Neowashingtoniae* Shear, l. c. p. 162. — *Stromatibus 4791 amphigenis, numerosis, sparsis, subellipticis, irregulariter depresso et subcollabentibus, nigris, nitidis, minute punctatis, 3-8 mm. long. saepe macula flavo-brunnea insidentibus; loculis numerosis, minutis, ovato-oblongis, ostiolis paucis v. nullis umbilicatis; ascis fugacibus globosis v. subglobosis, subsessilibus, octosporis, 100-120 μ . diam.; paraphysibus?; sporidiis oblongo-ellipsoideis, levibus, subcompressis, subsulcatis, initio strato mucoso hyalino obvolutis, dein nudis, et saturate castaneo-brunneis, 56-68 \approx 30-36.*

Hab. in foliis *Neowashingtoniae* filamentosæ, National City California. — Quoad alias *Auerswaldiae* species huc ducendæ cfr. Shear l. c.

Sect. 4. Hyalodidymæ.

PLOWRIGHTIA Sacc. — Syll. II p. 635, IX p. 1041, XI p. 376, XIV p. 680, XVI p. 628, XVII p. 845.

1. *Plowrightia neo-mexicana* Earle, Bull. of the N. York Bot. Gard. 4792 (1904) p. 291. — *Stromatibus primum infossis, mox erumpenti-superficialibus, nigris, rugulosis, tenuibus, crustaceis, orbicularibus v. saepe ovoideis, 0,5 mm. circ. diam., plerumque confluenti-aggregatis et tunc plus minusve elongatis et usque ad 3 mm. diam.; loculis 6-12 vel ultra in quoque stromate, parvis, confertis, intus albis, superficiem leniter inflantibus, ostiolo obscuro; ascis ellipso-*

deo-oblongis, breviter pedicellatis, a paraphysatis, circ. 60 × 14; sporidiis distichis, hyalinis, ovoideis, inaequaliter uniseptatis, fortiter constrictis, 20-22 × 7-10, cellula minori plerumque 9 × 7.

Hab. in ramis emortuis *Ampelopsis* quinquefoliæ, inter San Ignacio et Las Vegas, New Mexico (T. D. A. COCKERELL).

2. **Plowrightia placida** Sydow, Deutsche Zentral-Afrika Exped. (1907-1908) II Bd. p. 99. — Stromatibus epiphyllis, dense sparsis, maculis nullis, sub epidermide ortis, erumpentibus et tandem subsuperficialibus, applanato-globosis, basi coarctatis, plerumque centro tantum matrici insidentibus, atris, 200-300 µ. diam., superficie ob loculos paucos prominulos rugosis, loculis c. 3-8 in quoque stromate; ascis clavatis v. anguste saccatis, apice rotundatis, leniter incrassatis, subsessilibus, 50-70 × 14-18, octosporis, a paraphysatis; sporidiis distichis, fusoideis, medio 1-septatis, non constrictis, 18-30 × 5-8, hyalinis v. subhyalinis.

Hab. in foliis Fici oreodryadum, Rugege-Wald Africa trop. — *Plowrightia basirufæ* (B. et C.) v. Höhn. et *Pl. Koordersei* (P. Henn.) v. Höhn. affinis.

3. **Plowrightia Agaves** Maubl., Bull. Soc. Myc. Fr. XXIII (1907) 4794 p. 143. — Ita vocanda *Hypocrea Agaves* Maubl. — Syll. XVII, p. 802 — ex ipso auctore.

4. **Plowrightia Williamsoniana** Kellerm., Journ. of Mycol. XII (1906) 4795 p. 186. — Stromatibus per epidermidem erumpentibus, globosis vel subpolygoniis vel oblongis, 250-750 µ. alt., 0,5-2 mm. long., concentrica seriatim dispositis, primum maculum definitam suborbicularē v. oblongam efformantibus, saepe folio partim v. omnino tandem infecto; stromatibus primum fulvis dein fuscis demumque nigris, minute papillatis, non carbonaceis supra conidiferis; loculis numerosis usque ad 40 et ultra 110-125 × 90-120; ascis numerosis oblongis v. subovato-oblongis, inferne attenuatis 60-90 × 12-20, parietibus crassis, octosporis; sporidiis subdistichis, subaequaliter bilocularibus, ovoideo-oblongis, subfulvis v. hyalinis, plerumque 22-24 × 5-6; paraphysibus non visis.

Hab. in foliis vivis v. languidis *Agaves americanæ* prope urbem Guatimalam America centr. alt. 1200-1800 m. (W. A. KELLERMAN). — Teste cl. Maublanc non satis differt a specie praecedente.

5. **Plowrightia Massariae** (Pass.) Saccardo, Not. Myc. VI, Ann. Myc. 4796 v. III (1905) p. 506, *Epicymatia Massariae* Pass. — Syll. I, p. 573.

— Stromatibus pulvinatis in ostiolo *Massariae* parasiticis, vix 1 mm. latis, nigris, subcorneis, intus minute pluri-locellatis, loculis excipulo proprio parentibus, 80 μ . diam., pallidis; ascis oblongo-cylindraceis, facile diffluentibus, paraphysibus filiformibus fuscellis copiose obvallatis; sporidiis fusoideo-oblongis, utrinque obtuse tenuatis 12-16 \times 6-7,5, rectis, 1-septatis, non constrictis, hyalinis, farctis.

Hab. in ostiolis *Massariae Curreyi* ad ramos *Tiliæ* in viridario publico, Parma Ital. bor. (PASSEPINI). — Species inter *Dothideaceas* eximia et vere peculiaris ob parasitismum in Pyrenomyctis. Status pycnidicus est *Placosphaeria Massariae*, quam cfr.

6. *Plowrightia luxurians* Rehm in Theissen Beih. Bot. Centralbl. Bd. 4797 XXVII (1910) Abt. II, p. 392. — Stromatibus crasse pulvinatis v. subglobosis, 6-20 mm. diam., intus lignosis, extus atris, papillis obtuse conoideis, asperrimis; peritheciis in strato peripherico polystichis, immersis; ascis cylindraceis, breviter stipitatis, p. sp. 110-130 \times 10-12; sporidiis ellipsoideis, hyalinis, rotundatis, 18-24 \times 8-10, primo diuque continuis, demum 1-septatis.

Hab. ad ramos, Rio Grande do Sul Brasilie.

7. *Plowrightia Hieronymi* (Speg.) Spegazz., Fungi Paulist. Rev. Mus. 4798 La Plata t. XV, pag. 27. — Ita vocanda *Dothidella Hieronymi* Spegazz. — Syll. II, p. 627 — ex ipso auctore.

MICROCYCLUS Sacc. — Syll. XVII, p. 844. — Pro *Microcyclo scutula* (B. et C.) Sacc. et Syd., prof. v. Höhnel novum genus condidit nomine *Coccoidella*, cum gen. *Microcyclus* Sacc. ex parte cum *Polystomella* Speg. collidat; rectius tamen servandum est nomen *Microcyclus*, addita nota: *char. emend.*

1. *Microcyclus Derridis* P. Henn., Fl. du Bas- et Moy.-Congo, Ann. 4799 Mus. du Congo, v. II, fasc. II (1907) p. 99. — Maculis flavidulis; stromatibus superficialibus amphigenis plerumque epiphyllis gregariis v. sparsis et nervos sequentibus, disciformibus, atris opacis, rugulosis; c. 0,2-0,3 mm. diam.; loculis immersis paucis; ascis clavatis, obtusis, 8-sporis, 30-55 \times 14, paraphysatis; sporidiis subdistichis oblongis v. subclavatis, hyalinis, medio 1-septatis haud constrictis, 10-15 \times 4-5.

Hab. in foliis Derridis, Dembo Congo, Africæ trop.

2. *Microcyclus Koordersii* P. Henn., in Koorders, Botan. Untersuch. 4800 (1907) p. 183, fig. 15(1-6) et in Rehm Ascomyc. exsicc. n. 1615. — Stromatibus superficialibus hypophyllis, gregarie sparsis, inter-

dum confluentibus, pulvinato-discoideis, coriaceis, atris, rugulosis, sparse setulosis, 0,3-1 mm. diam.; loculis subimmersis ellipsoideis, porosis, atro-olivaceis; ascis clavatis apice obtuso-rotundatis, 8-sporis, 55-65 \times 10-15, a paraphysatis; sporidiis subdistichis, oblonge fusoideis v. subclavatis, utrinque rotundatis, interdum subcurvulis, medio 1-septatis, haud constrictis, hyalinis, 22-32 \times 4,5-5,5.

Hab. in foliis vivis *Myricæ germanicæ* (?) in M. Sendoro prope Kledung Java (KOORDERS)

DIPLOCHORA v. Höhnel, Sitzb. k. Ak. d. Wiss. Wien, CXV Abt. I (1906) pag. 1201 (Etym. *diploos* duplex et *chora* pro *Phyllachora*). Est genus *Phyllachoræ* affine sed sporidiis connato-binis. Huc du-cenda est *Physalospora dissospora* Feltg., Sacc., Syll. XVII, p. 583.

DOTHIDELLA Speg. — Syll. II p. 627, IX p. 1036, XI p. 375, XIV p. 676, XVI p. 626, XVII p. 846.

1. **Dothidella spinicola** v. Höhn., Ann. Naturh. Hofmus. Wien XX, 4801 (1905) Heft 4, Extr. pag. 3. — Stromate tenui, ruguloso, nigro, pseudoparenchymatico, poris loculorum pertuso; paraphysibus nullis; ascis octosporis, elongato-ovoideis crasse tunicatis, 35-40 \times 16; sporidiis hyalinis, utrinque rotundatis, uno latere angustatis, elongato-clavatis, bilocularibus, 2-3-guttulatis, 12-13 \times 5.

Hab. in spinis foliorum *Astragalii* sp., Lifos Erdschias-Dagh, Anatolia.

2. **Dothidella ? platyasca** Speg., An. Mus. Nac. Buenos Aires t. XIX, 4802 p. 420, cum icon. — Stromatibus epiphyllis densiuscule gregariis hemisphaericis, innato-prominulis 150-250 μ . diam., nitentiusculis 1-locularibus, loculo globuloso 100-120 μ . diam.; ascis compresso-applanatis e fronte obovatis e latere linearibus sessilibus, 42-55 \times 10-20 non v. parce paraphysatis; sporidiis obovatis ad tertium inferum 1-septatis, ad septum non v. leniter constrictis, 14-17 \times 6-8; primo hyalinis dein chlorinis.

Hab. ad folia viva *Pithecolobii scalaris* in silvis prope Orán Argentine Amer. austr.

3. **Dothidella Stellariae** (Lib.) J. Lind, Ann. mycol. (1905) pag. 428, 4803 *Dothidea Stellariae* Lib., *Euryachora Stellariae* (Lib.) Fuck. — Syll. II, p. 625. — Status ascophorus: ascis 25 \times 10, octosporis; sporidiis inaequaliter bicellularibus, hyalinis, 10 \times 5, cellula inf. 3 \times 3.

Hab. in foliis caulinisque *Stellariae holosteæ*, Viborg Danicæ, socio pycnidio (*Placosporria Stellariae* Sacc.).

4. **Dothidella Hualaniæ** Speg., An. Mus. Nac. Buenos Aires t. XIX 4804 (1909) p. 419. — Stromatibus laxe gregariis erumpentibus tuberculiformibus et 2-3 mm. diam., nigris, loculis constipatis, globosis vix papillato-ostiolatis 90-100 μ . diam.; ascis subclavulatis basi breviter crasseque pedicellatis, 70 \times 16, aparaphysatis v. pseudoparaphysibus parcis immixtis, octosporis; sporidiis distichis ellipsoideo-didymis, utrinque rotundatis 16-18 \times 8-9, parum infra medium 1-septato-constrictis, hyalinis.

Hab. ad ramulos languidos v. emortuos Hualaniæ collectio dis, Potrerillos prope Mendoza Argentina America austr.

5. **Dothidella mulinicola** Speg., An. Mus. Nac. Buenos Aires t. XIX 4805 (1909) p. 420. — Stromatibus matricem fere totam ambientibus atque infuscantibus, carbonaceis, loculis numerosis constipatis, subglobosis 70-80 μ . diam.; ascis ellipsoideo-subclavatis aparaphysatis, basi brevissime noduloseque pedicellatis, 60 \times 20, octosporis; sporidiis acicularibus, uniseptatis, non constrictis, hyalinis, 30-40 \times 4-5.

Hab. ad folia viva Mulini axilliflori in alpinis Jujuy, Argentina Amer. aust.

6. **Dothidella Buxi** v. Höhn., Ann. mycol. III (1905) p. 330. — Stro- 4806 matibus in maculis albidis linea nigra limitatis, insidentibus, subcopiosis, $1\frac{1}{2}$ - $9\frac{1}{10}$ mm. diam., nigris, carbonaceis, pseudoparenchymaticis, irregulariter angulosis, epidermide lacinulata limitatis, in epiphylo levibus v. rugulosis; loculis numerosis, ovoideis, c. 100 μ . cr.; ascis numerosis, clavatis, octosporis, 80 \times 6-8; paraphysibus paucis filiformibus; sporidiis distichis, hyalinis, bilocularibus, loculo uno majore, medio non v. vix constrictis, 11-14 \times 2-3,5, elongatis, utrinque rotundatis.

Hab. in foliis adhuc vivis Buxi sempervirentis, prope Evisa Corsica.

7. **Dothidella peruviana** P. Henn., Engl. Jahrb. XL (1907) p. 227. — 4807 Stromatibus hypophyllis, innato-superficialibus, sparsis vel gregariis, pulvinato-applanatis, rotundatis vel effusis confluentibusque, atris opacis, rugulosis, ostiolis prominulis obtusis, usque ad 1 cm. longis, 2 mm. latis; loculis immersis, subglobosis c. 150-160 μ . diam.; ascis fusoideis v. clavatis, apice crasse tunicatis, obtusiusculis, 8-sporis, obsolete paraphysatis, 80-100 \times 17-20; sporidiis subdistichis v. congregatis, longe fusoideis, rectis v. curvulis, obtusiusculis v. acutiusculis, medio 1-septatis, hyalinis, 35-50 \times 5-7.

Hab. in foliis Baccharidis sp., Sandia Perù (WEBERBAUER).

8. **Dothidella Diplothemii** Syd., Ann. Mycol. V (1907) p. 360. — Ma- 4808 Syll. fung. XXII (IX-1912)

culis nullis; stromatibus epiphyllis, innatis, sparsis vel seriatim ordinatis, minutis et oblongis vel plerumque confluentibus, linearibus et tunc usque $\frac{1}{2}$ -1 cm. longis, atris, carbonaceis, nitidis; loculis paucis vel pluribus, majusculis; ascis oblongo-clavatis, apice rotundatis, basi in pedicellum longiusculum attenuatis, rectis vel curvulis, 50-70 \times 10-14, octosporis; sporidiis distichis, oblongis, utrinque lenissime attenuatis, medio 1-septatis, non constrictis, hyalinis vel hyalino-chlorinatis, 14-16 \times 3-5; stromatibus conidiophoribus similibus, sed plerumque minoribus; conidiis navicularibus, utrinque acutiusculis, 1-cellularibus, intus nubilosus, hyalinis, 14-16 \times 2-2 $\frac{1}{2}$.

Hab. in foliis *Diplothemii maritimi*, Rio de Janeiro, Brasilæ.

9. *Dothidella Musæ* v. Höhn., Fragm. z. Mykol. V, Sitzb. k. Ak. d. 4809 Wiss. Wien, Bd. CXVI, Abt. I (1907) pag. 130. — Stromatibus hypophyllis, arce confertis v. hinc inde in crustas 0,5-1,5 mm. latas, rotundatas, irregulariter scabras confluentibus, minutis usque ad 250 μ . latis, nitidulis, nigris, loculo usque ad 180 μ . lato; paraphysibus paucis, crassiusculis filiformibus; ascis clavatis, supra rotundatis, sessilibus, octosporis, 40-60 \times 9-10; sporidiis distichis, hyalinis, medio non septato-constrictis, apice acutis v. obtusulis, rectis v. curvulis, 14-16 \times 4-4,5.

Hab. in foliis *Musæ paradisiacæ*, Upolu prope Apia Samoa (RECHINGER).

10. *Dothidella Andropogonis* P. Henn., in Fl. du Bas- et Moy.-Congo, 4810 Ann. Mus. du Congo v. II, fasc. II (1907) p. 98. — Stromatibus amphigenis, gregariis, rotundatis v. oblongis, atris, planis, loculis immersis; ascis oblonge clavatis, vertice obtuse rotundatis, 8-sporis 70-90 \times 8-12, paraphysibus filiformibus, ramosis, c. 0,5 μ . cr.; sporidiis oblique monostichis v. subdistichis, ellipsoideis, hyalinis, medio septatis haud constrictis, 8-12 \times 6-8,

Hab. in foliis *Andropogonis*, Kisantu Congo Afr. trop. (VANDERYST).

MUNKIELLA Speg. — Syll. IX p. 1034, XVI p. 625.

1. *Munkiella melastomata* v. Höhn., Fragm. z. Mykol. (1909) VIII, 4811 in Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, pag. 1220. — Stromatibus numerosis gregariis v. per paginam superiorem immutatam foliorum sparsis, rotundatis 0,3-1,5 mm. latis, quandoque paucis adnatis, 1-3-loculigeris, depresso conoideis v. hemisphæricis,

levibus, verruculosis v. radiatim rugosulis, nigro-piceis nitidis, usque ad 200 μ . altis, subcuticularibus; contextu partim parenchymatico; paraphysibus paucis, tenuibus, filiformibus; ascis tenuiter tunicatis, supra rotundatis, basi breviter acutatis, sessilibus, 44-64 \times 12-17, octosporis; sporidiis plerumque distichis, hyalinis, senio flavidulis, ellipsoideis, basi breviter attenuatis, bilocularibus; loculo superiore majuscule, inferiori 1,5-2 μ . alto; sporidiis 13-16 \times 6,5-8, stratu mucoso tenuissimo vestitis.

Hab. in foliis vivis Melastomatis malabathrici prope Buitenzorg in ins. Java. — *Munkiella ? pulchellæ* Speg. videtur affinis.

SCIRRHIA Nits. ap. Fuck. — Syll. II p. 634, IX p. 1040, XI p. 376, XIV p. 679.

1. *Scirrhia luzonensis* P. Henn., Hedwigia XLVII (1908) p. 256. — 4812 Maculis oblongis vel striiformibus, fuscis; stromatibus epiphyllis sparsis, oblongis, erumpentibus, fusco-atris, 0,5-1 mm. longis, loculis seriatis ostiolatis; ascis clavatis, obtusis, 8-sporis, 60-80 \times 7-9; sporidiis subdistichis, oblonge fusoides, utrinque acutis v. rostellatis, hyalinis, medio 1-septatis, 20-30 \times 3-5.

Hab. in foliis Bambusæ, Luzon, Prov. Laguna, Los Baños ins. Philipp. (MERRILL).

Sect. 5. Phæodidymæ.

DOTHIDEA Fr. — Syll. II p. 639, IX p. 1043, XI p. 377, XIV p. 680, XVI p. 628, XVII p. 852.

1. *Dothidea Sambuci* (Pers.) Fr. — Syll. II, p. 639 — Var. *Hederae* 4818 De Not. Micromyc. Dec. I, p. 18, fig. 8 (extr.). — A typo vix differt stromatibus latioribus, atro-nitidis, intus obscurioribus; cetera eadem.

Hab. ad sermenta Hederae Helicis emortua in collibus pr. Taurinum Ital. bor. — Var. *Ilicis* Jacz. in Bull. Soc. Mycol. Fr. XI (1895) p. 173, t. 14, f. 9. — Sporidiis paullo majoribus, nempe 25 \times 7,5. — In foliis ramulisque Ilicis Aquifolii, in silvis Vaud Helvetiæ.

2. *Dothidea tumefaciens* Syd., Ann. Mycol. V (1907) pag. 360. — 4814 Stromatibus ramicolis, tumores 1-2 cm. longos et crassos efformantibus, erumpentibus, pulvinatis, 1-2 mm. diam., solitariis vel

aggregatis confluentibusque, rugulosis, atris, opacis; peritheciis numerosis; ascis clavatis, apice rotundatis, breviter pedicellatis, 50-75 \times 9-15, octosporis; sporidiis distichis, oblongis, medio 1-septatis, primo hyalinis, dein olivaceis vel dilute brunneis, 20-28 \times 3 $\frac{1}{2}$ -5.

Hab. in ramis Serjaniae spec. Campinas, Prov. Sao Paulo, Brasilia. — A *Dothidella Serjaniae* pluribus notis distincta.

ROUSSOELLA Sacc. — Syll. IX p. 1044.

1. **Roussoella amphigena** Rick, Broteria V (1906) p. 44. — Stromata 4815 dothideaceo, erumpente, pulvinato, rugoso, aliquoties rhytismoideo et tunc loculis paucis, atro, orbiculari, amphigeno, gyroso, ostiolis consperso; ascis ventricosis 60-70 \times 20-25, versus apicem angustatis, vix pedicellatis; sporidiis cylindraceis aut rectangularibus, 25 \times 10, pluriserialibus, bicellularibus, loculo inferiore vix breviore flavidulis, in septa constrictis; paraphysibus conglutinatis.

Hab. in foliis vivis Lauraceæ cujusdam, Rio Grande do Sul Brasiliæ. — Videtur potius *Russoella* nec *Dothidea* ob cellulas sporidiorum fere æquales.

PHÆODOTHIS Syd. — Syll. XVII p. 854.

1. **Phæodothis congoënsis** Sacc., Myc. cong. novi, Ann. Myc. v. IV 4816 (1906) p. 77. — Stromatibus amphigenis, gregariis sed vix seriatis neque confluentibus, immersis, applanatis, ambitu irregulariter orbiculari-oblongis, 1 mm. longis, 0,5 mm. lat. v. minoribus, tenui-carbonaceis, opace nigris, intus paullo dilutioribus, 3-5-locelatis, loculis globosis 130-140 μ . diam., ostiolis punctiformibus vix manifestis; ascis tereti-clavulatis, apice rotundatis, deorsum leviter tenuatis, 50-60 \times 6,5-7,5 parce filiformi-paraphysatis, octosporis; sporidiis distichis, oblongis, utrinque, præcipue apice, obtuse rotundatis, rectis, medio 1-septatis, levissime constrictis, 14-15 \times 5-5,2, rectis, olivaceo-fuscis.

Hab. in foliis nondum putridis graminis cujusdam elatioris (habitu Sacchari stricti), Kisantu Congo Africæ trop. (J. GILLET). — Certe affinis *Phæodothidi Tricuspidis*, sed satis differt stromatibus non confluentibus nec seriatis, ascis angustioribus etc.

DISCODOTHIS v. Höhn. Fragm. Mykol. VII (1909) in Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 853 (Etym. *discos* et *Dothis* pro *Dothidea*). — Stromata primum strato conidico cladosporioideo omnino tecta, superficialia, omnino immersa, non secedentia; ostio-

la nulla; loculi depressi, indistincti, confluentes; paraphyses nullæ; asci octospori; sporidia bilocularia, brunnea. — *Maurodothis* Sacc. et Syd. est certe affinis sed differt stromate arctius adnato, statu conidico nullo, paraphysibus bene evolutis.

1. *Discodothis Filicum* v. Höhn., l. c. p. 854. — Stromate rotundato 4817 v. elongato 0,5-1,5 mm lato, 90-100 μ . crasso, plectenchymatico, demum glabro, opaco, ruguloso nigro, primum conidiis pallide brunneolis, raro unilocularibus, utrinque ex obtuso acutatis, 8-9 \times 6,5-7, plerumque irregulariter bilocularibus 10-13 \times 6-7, medio constrictis, utrinque obtusis, in apice hypharum lateraliter parce dispositis tectis; loculis latis depressis, indistincte limitatis, ostiolis nullis sed demum stromate supra irregulariter ascomatiformi aperito; paraphysibus nullis; ascis clavatis, tenuiter tunicatis, supra non incrassatis, octosporis, sessilibus v. vix pedicellatis, 50-80 \times 10-12; sporidiis distichis, pallide brunneolis, elongatis, bilocularibus, loculo superiori parum latiori, utrinque rotundatis, 12-13 \times 5-6; hypostromate circ. 30 μ . cr., nigro-rubro-brunneo, indistincte parenchymatico.

Hab. in frondibus Filicis cujusdam in Horto bot. Buitenzorg in ins. Java.

Sect. 6. Hyalophragmiæ.

ROUMEGUERIA (Sacc.) P. Henn. Hedw. XLVII (1908) p. 256, *Homostegia* subg. *Roumegueria* Sacc. — Syll. II, p. 650 — A typo *Homostegia* differt imprimis sporidiis hyalinis (æque pluriseptatis) et habitatione in Phanerogamis. Est fere *Phyllachora* hyalophragmia.

1. *Roumegueria Ichnanthi* P. Henn., Hedwigia XLVII (1908) p. 256. 4818 — Maculis fuscidulis striiformibus; stromatibus amphidymis minutis, rotundatis, striiformiter confluentibus, atris, paucilocularibus; ascis clavatis v. fusoideis, obtusis v. acutiusculis sæpe curvulis, 8-sporis, 45-60 \times 5-7; sporidiis subdistichis, fusoideis, utrinque subacutis, sæpe curvulis, hyalinis, 4-5-septatis, 15-20 \times 3 $\frac{1}{2}$ -4.

Hab. in foliis Ichnanthi sp., Mindora, Mt. Halcon ins. Philippin. (MERRILL).

2. *Roumegueria graminis* (v. Höh.) Sacc. et Trott., *Homostegia graminis* v. Höhnel, Fragm. z. Mykol. III, in Sitzb. k. Ak. d. Wiss. Wien Bd. CXVI, Abt. I (1907) p. 131. — Stromatibus foliicolis

300 μ . circ. cr., rotundatis v. elongatis, nigris, immersis, in utraque pagina visilibus, sed in superiore magis evolutis, mono- v. bilocularibus, loculis 100-200 μ . latis; paraphysibus mox mucosis; ascis tenuiter tunicatis, clavatis, sessilibus, octosporis, 60-72 \times 5-6; sporidiis distichis, hyalinis, plerumque sexocularibus, subfusoideis, supra rotundatis, basi longe acutatis, 15-18 \times 3.

Hab. in foliis graminaceæ cujusdam (? *Panicum*), Samoa (RECHINGER). — Quum socia adsit sæpe etiam *Phyllachora graminis*, cum stromatibus simillimis iis *Homostegiæ*, dubium est an hæc parasitice vivat in stromatibus *Phyllachoræ*.

3. *Roumegueria gangræana* (Fr.) Sacc. in Ann. Myc. X (1912) p. 316, 4820
Phyllachora gangræana (Fr.) Fuck. — Syll. II, p. 604. — *Homostegia gangræana* (Fr.) Wint. Deutsch. Pilze II, p. 917.

Hab. in foliis vivis Poæ bulbosæ fm. viviparæ, Avelino, vere 1904, ubi ipse legi — Stromata nunc maculiformia, nunc valde elongata e totum fere folium occupantia et torquentia, aterrima, plano-convexula, intus plurilocellata; loculi globosi, non conferti, 100 μ . diam., ostiolis circularibus, non emergentibus, 20 μ . diam. pertusi. Asci tereti-saccati, apice rotundati, brevissime stipitati, 30-35 \times 11-12, octospori; paraphyses subtortuosæ, hyalinæ, parum distinctæ; sporidia subtristicha, v. oblique monosticha diu ovato-ellipsoidea, 1-2-guttata, 11 \times 4,5-5, denique oblonga, utrinque rotundata sæpius leviter curvula, 2-septata, 14 \times 5,5, semper hyalina.

COCCODIELLA Hara, Botan. Magaz. Tokyo v. XXV (1910) n. 293, pag. 224 (non *Coccoidella* Höhneliana, ubi sporid. 1-sept.). — Stroma obscurum, disciforme, plano - convexum, subtus centro stipitiformi appendiculatum; perithecia (loculi) immersa, globosa, ostiolata; asci cylindracei, octospori, paraphysati; sporidia ellipsoidea, biseptata, hyalina.

1. *Coccodiella Arundinariæ* Hara, l. c. p. 224, cum icono. — Stromatibus hypophyllis, raro epiphyllis, gregariis v. sparsis, subcarniosis, disciformibus, subtus stipitiformi appendiculatis, margine libero, 0,8-1,5 mm. (plerumque 1 mm. diam.), superficie minute granulosa, obscure coloratis, intus albis v. griseis, membranaceis; loculis immersis, globosis v. oblongis, ostiolatis 100-150 μ . diam.; ascis cylindraceis v. clavatis, stipitatis, octosporis, 50-66 \times 7-10; paraphysibus filiformibus 1-2 μ . cr., hyalinis; sporidiis distichis ellipsoideis v. cylindraceis (raro oblongis), biseptatis, hyalinis, 12-15 \times 4-5.

Hab. in foliis vivis Arundinariæ Simoni, prov. Musashi, Tokyo (MATSUSKA), Sasæ borealis, prov. Mino, Kawauyemura (HARA).

MONTAGNELLA Speg. — Syll. II p. 646, IX p. 1045, XI p. 377, XIV p. 682, XVI p. 629.

1. **Montagnella Berberidis** d'Alm. et da Cam., Bol. Soc. Brot. XXIV 4822 (1908-1909) Extr. pag. 21. — Stromatibus suborbicularibus, atris, solitariis, subsuperficialibus, diu epidermide velatis, $\frac{1}{4}$ - $\frac{1}{2}$ mm. dm.; loculis variis plus minus rotundatis; ascis clavulatis, sursum deorsumque saepe attenuatis, non v. vix pedicellatis, octosporis, apophysatis, 50-70 \times 14-16; sporidiis plerumque tristichis, oblongo-fusoideis, utrinque rotundatis, triseptatis, primo hyalinis, demum fuscis, medio constrictis, 15-18 \times 5-6.

Hab. in ramis exsiccatis Berberidis vulgaris, in Horto bot. Coimbra Lusitanæ (A. MOLLER).

2. **Montagnella Opuntiarum** Speg. — Syll. IX, p. 1047 — var. *minor* 4828 Spegazz. An. Mus. Nac. Buenos Aires t. XIX (1909) p. 422. — A typo recedit stromatibus 1-3 mm. diam.; ascis 60-70 \times 20; sporidiis 28-30 \times 5-6, 3-septatis, non constrictis.

Hab. ad flagella Rhysalidis lumbricoidis prope La Plata, Argentina. — Var. *microcarpa* Speg., l. c. p. 422. — Plagulis stromaticis orbicularibus majusculis 2-5 cm. diam. dense granuloso-loculigeris; ascis subfusoideis, 55-60 \times 8-15, apophysatis; sporidiis fusoideis utrinque acutatis 15-16 \times 2,5-3, 3-septatis non constrictis, hyalinis. — Ad trunco vivos Cerei candicantis, Cacheuta prope Mendoza Argentina. — An species distincta?

3. **Montagnella Missionum** Speg., An. Mus. Nac. Buenos Aires t. XIX 4824 (1909) p. 422. — Stromatibus subglobosis 2-3 mm. diam., gemmas v. ramulos infectantibus, nigris, verruculosis; peritheciis in stromate superficialibus, dense constipatis subglobosis 180-250 μ . diam.; ascis subcylindraceis brevissimeque stipitatis, 100-120 \times 16-25, parce paraphysatis; sporidiis saepius distichis, subcylindraceis 38-40 \times 9-10, 1-5-septatis, primo hyalinis dein olivaceis, submajusculis.

Hab. ad ramulos vivos Mayteni ligustrini? in silvis pr. Bompland Argentina, America austr. (P. JORGESEN).

4. **Montagnella mendozana** Speg., An. Mus. Nac. Buenos Aires t. XIX 4825 (1909) p. 421, cum icon. — Stromatibus endogenis per ramulos incrassatos fissos erumpentibus nigris, subcarbonaceis dense gra-

nuloso-loculigeris, 1-5 cm. long., loculis hemisphæricis 120-180 μ . diam. eximie papillato-ostiolatis albo-farctis; ascis subclavatis breviter crasseque pedicellatis 100-110 \times 18-20, octosporis, paraphysatis; sporidiis distichis cylindraceis, 40 \times 8-9, 3-septatis, ad septa non constrictis, primo hyalinis serius fumosis.

Hab. ad ramos vivos Artemisiæ mendozanæ in preandinis Cacheuta et Potrerillos prope Mendoza, Argentina Amer. austr.

RHOPOGRAPHELLA P. Henn. ut subg., Fung. Amaz. II, pag. 257 (1904) et Syll. XVII, p. 858. — A typo *Rhopographi* distinguitur sporidiis hyalinis v. subhyalinis et subinde appendiculatis. — Huc ducendæ species *Rhop. Gaduæ* (P. Henn.) Sacc. et Trott. et *Rhop. Gynierii* (P. Henn.) Sacc. et Trott.

1. **Rhopographella Taquaraæ** (Rehm) Sacc. et Trott., *Rhopographus Ta-* 4826 *quaraæ* Rehm, Ann. Mycol. VI (1908) pag. 318. — Stromatibus parallele innatis, culmum ampliatum ambientibus et nigrificantibus, demum striiformiter perforantibus, itaque rimosis, extus nigris, 1-2 cm. longis, intus flavo-virentibus, ostiolis globosis, in rimis culmi seriatis; loculis immersis, monostichis, globosis, 0,15 mm.; ascis cylindraceo-clavatis, apice rotundatis, ca. 150 \times 15-18, octosporis; sporidiis oblongo-fusoideis, utrinque subobtusis, haud appendiculatis, 5-7-septatis, ad septa non constrictis, plerumque rectis, hyalinis, 30-35 \times 6-7, distichis; paraphysisibus filiformibus, hyalinis, 2 μ . crassis.

Hab. in culmo *Gaduæ Taquaraæ*, São Leopoldo, Rio Grande do Sul Brasiliæ (Rick S. J.). — Affinis *Rhopographellæ Gaduæ* sed satis distincta.

Sect. 7. Phæophragmiae.

HOMOSTEGIA Fuck. — Syll. II p. 649, IX p. 1049, XIV p. 683, XVI p. 631, XVII p. 857.

1. **Homostegia Piggotii** (B. et Br.) Karst. — Syll. II, pag. 649. — 4827 var. **Peltigeræ** Rehm, Ann. Mycol. VI (1908) pag. 524. — Ascis cylindraceis c. 100-120 \times 18-20, octosporis; sporidiis 4-locularibus, 1 v. 2 cellulis mediis longitudinaliter divisis, flavo-brunneis, 21-25 \times 10-12, monostichis.

Hab. in *Peltigera canina* prope Hohenaschau Bavaria (SCHNABL), Scheibenhof prope Kreims Austriae inf. (LOJKA).

2. **Homostegia andina** Speg., An. Mus. Nac. Buenos Aires t: XIX 4828 (1909) p. 423. — Stromatibus minutis erumpentibus, 0,5-1 mm. long., 0,2-0,4 mm. diam., pauci-locularibus carbonaceis, loculis constipatis 100-150 μ . diam.; ascis subcylindraceis a paraphysatis, basi brevissime noduloseque pedicellatis 70-80 \times 16, octosporis; sporidiis elongato-didymis, distichis, utrinque obtusiusculis 18-22 \times 7-8, primo 1- series 3-septatis, 2-4 grosse guttulatis, olivaceis.

Hab. ad ramulos Verbenæ ephedroidis in præandinis Cacheuta, prope Mendoza Argentina Amer. austr.

3. **Homostegia fusispora** Syd., Ann. Mycol. VIII (1910) pag. 39. — 4829 Maculis amphigenis, minutis, flavidis, 2-4 mm. diam., indeterminatis; stromatibus epiphyllis, immersis, solitariis v. paucis aggregatis, minutis, parum prominulis, ellipticis, atris, intus 1- v. pauci locularibus, $\frac{1}{3}$ - $\frac{1}{2}$ mm. long.; ascis fusiformibus v. clavatis, 60-100 \times 12-18, octosporis; sporidiis fusoideis, utrinque acutiusculis, distichis, 6-7-septatis, non constrictis, primo hyalinis, tandem brunneolis, 30-40 \times 6-7.

Hab. in foliis vivis Bambusæ, Dumaguete in Cuernos Mts. prov. Negros or. ins. Philippinensis (A. D. E. ELMER).

Sect. 8. Hyalodictyæ.

CURREYELLA (Sacc.) Lind. in Engl. Pflanzenf. I, p. 379. *Curreya* subg. *Curreyella* Sacc. Syll. XI, p. 379.

1. **Curreyella Aucupariæ** R. L. Smith, Trans. Brit. Mycol. Soc. 1907 4830 v. III (1908) p. 43, tab. I, fig. 9. — Stromatibus cortici interiori adnatis, erumpentibus, fusco-nigris magnitudine ludibundis, hemisphaericis v. elongatis, c. 1 mm. long.; loculis seu peritheciis paucis; ascis clavatis usque ad 200 \times 12; sporidiis clavato-fusoideis, 5-6-septatis parceque muriformibus, ad septa submedia leviter constrictis, 30-40 \times 8-10, hyalinis.

Hab. ad ramos Piri Aucupariæ, Dunkeld Scotiae (MAC INTOSH). — Loculi indicatur 30-40 μ . diam., sed probabiliter legendum est 300-400.

2. **Curreyella palmincola** (Rehm) Sacc. et Trott, *Curreya palmincola* 4831 Rehm, Ann. Mycol. V (1907) p. 530. — Stromatibus innatis, oblongo-ellipsoideis, 2-12 mm. longis, 2-6 mm. latis, in utraque folii

pagina conspicuis, planis, purpureis, flavidulo-marginatis, tenuibus, contextu membranaceo, parenchymatico, fusco, glabris; loculis per multis ca. 100 μ . latis confertis, apice globoso-subprominentibus, siccis ruguloso-collapse; ascis subglobosis, crasse tunicatis, ca. 30 \times 25, octosporis; sporidiis oblongis, utrinque rotundatis, rectis, transverse 3-septatis, cellula secunda longitudinaliter 1-septata, hyalinis, 12 \times 4; paraphysibus ramosis, ascis circumeuntibus.

Hab. in folio Palmæ, São Paulo, Brasilia (USTERI). — *Curreya bambusicola* proxima, sed probe distincta.

3. *Curreyella Rehmii* (Schnabl) A. L. Smith., l. c. p. 43 = *Curreya* 4832 *Rehmii* Schnabl — Syll. XI, p. 379.

Sect. 9. Scolecosporæ.

OPHIODOTHIS Sacc. — Syll. II p. 552, IX p. 1051, XIV p. 685, XVI p. 632, XVII p. 859.

1. *Ophiiodothis Arundinellæ* P. Henn., Engl. Jahrb. XXXVII (1905) 4833 p. 162. — Stromatibus in axillis vaginarum inclusis, corniformibus cylindraceis, obtusis, atris, c. 5 mm. long., 2 mm. cr. verrucoso-rugulosis; loculis dense stipatis, ovoideo-ellipsoideis; ascis longe cylindraceis apice rotundato-capitellatis, octosporis, 120-150 \times 4-6; sporidiis parallelis, filiformibus, pluriguttulatis v. septulatis, hyalinis, 1,5-2 μ . latis.

Hab. ad culmos Arundinellæ anomalæ, Umajiura Tosa Japonia (YOSHINAGA). — *O. Paspali* P. Henn. affinis sed stromatibus brevioribus, ascis longioribus, sporidiis latioribus diversa.

2. *Ophiiodothis Schillingii* P. Henn., Engl. Jahrb. XXXVIII (1905) 4834 pag. 114. — Stromatibus cylindraceo-typoideis, apice attenuatis, subulatis, spicas omnino destruentibus deformantibusque, crusta atra vestitis, 6-7 cm. long., 3-4 mm. cr.; loculis gregariis immersis, globulosis, c. 140-170 μ . diam., punctoideo-ostiolatis; ascis cylindraceis, apice obtuso-rotundatis, octosporis, 100-130 \times 4-5; sporidiis parallelis, filiformibus, pluriguttulatis v. septulatis, hyalinis, 1-1,5 μ . cr.

Hab. in inflorescentiis Rottboelliae sp., Sokode Togo Africæ centr. (SCHILLING).

Incertæ sedis.

- MYXODISCUS** v. Höhn., Fragm. z. Mykol. II, in Sitzb. k. Ak. d. Wiss. Wien CXV (1906) Abt. I, p. 23.
1. **Myxodiscus confluens** (Schwein.) v. Höhn., l. c. pag. 23, *Xyloma* 4885 *confluens* Fr., *Rhytisma confluens* Fr. — Syll. VIII, p. 760 — *Dothichiza ? Eupatorii* C. Mass. — Syll. X, p. 433 — *Leptostroma Eupatorii* Allesch.

Fam. 7. Hypocreaceæ ().**Sect. 1. Hyalosporæ.*

- HYPNŒCTRIA** Sacc. — Syll. II p. 455, XI p. 354, XIV p. 621, XVI p. 559.

1. **Hypnœctria Volkartiana** Rehm, Ann. Mycol. V (1907) p. 543. — 4886 Peritheciis in maculis fuscis 1 cm. long., 0,2-0,4 cm. lat., præcipue corticis interioris caulinum gregarie innatis per peridermium elatum erumpentibus, denique sessilibus, globosis, vix papillulatis, fusco-nigrescentibus, pruina aurea obductis glabris, contextu tenuiter parenchymatico, fusco-rubro, 0,3 mm. diam.; ascis cylindraceis vel subfusiformibus, apice rotundatis, 120-130 × 12-15, octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, guttulis oleosis repletis, strato mucoso 2 µ. lat., obductis, hyalinis, 18-20 × 9-10, 1-stichis; paraphysibus filiformibus, septatis, 3 µ. cr. *Hab.* ad caules siccos Phacæ frigidæ, Fürstenalp, Graubünden Helvetiæ, 1900 m. alt. (Dr. VOLKART). — *Hyp. Penziana proxima*.
2. **Hypnœctria Rhododendri** Rehm, Ann. Mycol. V (1907) p. 544. — 4887 Peritheciis hypophyllis, dispersis, innatis, in folii superficie haud mutata, semiglobosis, elatis, ostiolo minutissimo nigrescente promissa.

(*) De non pánctis generibus et speciebus Hypocreacearum ofr. observationes et emendationes cl. v. Höhnel in ejus variis contributionibus nuperioribus (in Sitzungsb. k. Akad. Wien, in Ann. Mycol. etc.) nec non cl. Seaver in « Mycologia » 1910.

nentibus, globosis, contextu parenchymatico flavo-fuscidulo tenui, glabris, mollibus, 200 μ . diam.; ascis tenerimis, clavatis, apice rotundatis, in stipitem sensim elongatis, 150-160 \approx 20-25, octosporis; sporidiis fusiformibus, plerumque utrinque acutatis, interdum apice superiore rotundatis, rectis, 1-cellularibus, guttas oleosas magnas 1-3 continentibus, ceterum guttulis minutissimis repletis, strato tenui gelatinoso obductis, flavidо-roseolis, 40 \approx 7-10, distichis; paraphysibus tenerimis septatis, guttulis oleosis repletis, subramosis, 2 μ . cr., hyalinis.

Hab. ad folium putrescens *Rhododendri ferruginei* in alpe Alpein, Stubai, Tiroliae 2000 m. (REHM). — Primo obtutum cum *Lophodermio Rhododendri* fere commutanda.

3. *Hyponectria dakotensis* Sear. Mycologia I (1909) p. 20, tab. II, 4838 fig. 1-4. — Peritheciis sparsis v. subinde 2 v. pluribus congestis, demum plus minus erumpentibus, initio epidermide albida velatis, ostiolo disciformi erumpente, centro distincte pertuso praeditis, praesertim circa ostiolum pilosulis, 200 μ . diam.; ascis clavatis, octosporis, 30-45 \approx 5; sporidiis 2-seriatis vel deorsum 1-seriatis, fusoideis, vulgo crasse 2-guttatis et utrinque minute 1-2-guttulatis, 10 \approx 2-2,5; paraphysibus delicatis.

Hab. in caulinis *Ambrosiae trifidae?*, Forgo N. Dakota Amer. bor.

PHYSALOSPORINA Woronichin, Ann. Mycol. IX (1911) pag. 217 (Etym. a *Physalospora*). — Perithecia immersa stromate phyllo-geno, tenui obsoleto, non carnosu immersa, globulosa, ostiolo brevi erumpente, contextu peritheciæ aurantio, roseo, ochraceo v. ostioli fuscescente molliusculo. Ascii elongati, octospori, typice paraphysati. Sporidia ellipsoideo-oblonga, continua, hyalina. Pycnidia: *Rhodosticta* Woronichin (h. e *Polystigmmina brevispora*). A *Polystigmata* typico differt stromate obsoleto, tenui, laxo, non carnosu, protuberante; a *Physalospora* peritheciis mollibus, lacticoloribus.

1. *Physalosporina aurantia* (Ell. et Ev.) Sacc. *Physalospora aurantia* 4839 Ell. et Ev. North Amer. Pyren. p. 304, t. XXVII, — Peritheciis gregariis, parenchymate immersis, suboblongis 175-200 \approx 130-150, contextu amœne aurantiaco; ostiolis obtusis erumpentibus epidermide levissime pustulata et atrata subtectis; ascis clavato-cylindraceis, 100-110 \approx 12-15, paraphysibus crassiusculis, septatis, hyalinis obvallatis, octosporis; sporidiis monostichis v. subdistichis

oblongo-ellipsoideis, utrinque rotundatis, 12-22 \times 8-9, hyalinis, levibus, intus granulosis.

Hab. in foliis languidis Astragali pectinati Sand Coulee, Montana (ANDERSON). — *Physalospora Astragali* (Lasch) Sacc. peritheciis contextu atro-fuligineo distingui videtur.

2. **Physalosporina Caraganæ** Woronichin in Ann. Mycol. (1911) v. VII, 4840
Physalospora Caraganæ Woron. in Bull. Jard. imp. bot. St. Pétersb. XI (1911) p. 12. — Stromatibus amphigenis, griseo-roseis; peritheciis gregariis globosis v. oblongis, 290-420 \times 240-325, stromate immersis, vix apice eminentibus, contextu parenchymatico, roseo-ochraceo ad apicem peritheciis brunneo; ascis cylindraceo-fusoideis, octosporis, 87-105 \times 14-16, paraphysibus filiformibus, hyalinis; sporidiis ellipsoideis, hyalinis monostichis, 12-14 \times 7-8.
Hab. in foliis languidis Caraganæ fruticis pr. Sosnovka, Samara Rossie (E. ISPOLATOV). — Status pycn.: *Rhodosticta Caraganæ* Woron. quam cfr. — *Physalospora Astragali* peritheciis contextu atro-fuligineo distinguitur.
3. **Physalosporina obscura** (Juel) Woronich., l. c. — Ita vocandum 4841
Polystigma obscurum Juel — Syll. XIV, p. 625.
4. **Physalosporina megastoma** (Peck) Woronich., l. c. — Ita vocanda 4842
Physalospora megastoma (Peck) Sacc. — Syll. I, p. 437.
5. **Physalosporina australiensis** Sacc. — Ita vocandum *Polystigma australiense* Sacc. — Syll. IX, p. 945.
6. **Physalosporina astragalina** (Rehm) Woronich. l. c. — Ita vocanda 4844
Læstadia astragalina Rehm — Syll. XIV, p. 516.

- NECTRIELLA** Sacc. — Syll. II p. 448, IX p. 941, XI p. 354, XIV p. 621, XVI p. 559, XVII p. 778.
1. **Nectriella bacillispora** Trav. et Spessa, Bol. Soc. Brot. XXV (1910) 4845 p. 172 t. I, f. 5. — Peritheciis plerumque 4-6-cæspitosis, per epidermidem laceratam erumpentibus, globoso-dépressis, 150-200 μ . diam., rubro-aurantiacis, circa ostium vix perspicuum umbilicatis; excipulo indistincte pseudo parenchymatico, aurantiaco-flavido; ascis copiosis, anguste cylindraceo-clavatis vel subfusoideis, deorsum attenuato-pedicellatis, apice obtusis, 30-35 \times 5-6 parce paraphysatis; sporidiis cylindraceo-bacillaribus, utrinque obtusis, biguttulatis, hyalinis, 5-6 \times 1-1 $\frac{1}{2}$, distichis.

Hab. in foliis siccis Fourcroyæ giganteæ in horto botanico conimbricensi Lusit. (A. MOLLER). — *Nectrielloë militinæ* valde

affinis; differt præcipue ascis minoribus, sporidiis minutis, perfecte bacillaribus et biguttulatis.

2. *Nectriella musicola* (Speg.) Sacc. et Trott., *Notariella musicola* 4846
Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 404. —
Peritheciis tidis globulosis siccis subcorrugato-cupulatis 120-150 μ .
diam., carnosulo-membranaceis, contextu roseo-subhyalino, minute
albo-puberulis superne subglabratibus; ascis obclavatulis, basi brevi-
ter cuneato-pedicellatis 60-65 \times 10-12, octosporis, a paraphysatis;
sporidiis ellipsoideis, oblique distichis, 10-13 \times 5-6, primo subdibla-
stis dein grosse 1-guttulatis, levibus hyalinis.

Hab. ad caudices semicombustos putrescentesque Musæ pa-
radisiacæ prope Tucumán, Argentina America aust. — A *Nec-
tria Musæ* Pat. sporidiis semper ellipsoideis 1-locularibus distincta.

RHYNCHONECTRIA v. Höhn (1903) — Syll. XVII p. 798 = *Eleu-
therosphaera* Grove, Journ. of Bot. (1907) p. 171.

1. *Rhynchonectria longispora* (Ph. et Plowr.) v. Höhn. l. c. — Ita 4847
vocanda est *Eleutherosphaera longispora* (Ph. et Plowr.) Grove —
Syll. IX, p. 942.

THELOCARPON Nyl. — Syll. IX p. 946.

1. *Thelocarpon conoideum* von Höhn (1906), Oest. bot. Zeitschr. Jahrg. 4848
1906, n. 11-12, Extr. p. 12. — Peritheciis viridi-flavidis, ovo-
ideo-conoideis, 200-300 μ . diam., 350-400 μ . alt., basi leniter im-
mersis; paraphysisbus numerosissimis, 0,5 μ . cr.; ascis numerosis,
longe pedunculatis, clavatis, supra cylindraceo-angustatis et apice
rotundatis circ. 200 \times 33; sporidiis numerosissimis, elongato-cylin-
draceis, utrinque rotundatis, unilocularibus, 6-11 \times 2,5-3.

Hab. ad terram in silvis prope Allensteig Austriae inf. —
Thelocarpo conoidello Nyl. affine.

BYSSONECTRIA Karst. — Syll. II p. 456, IV p. 942, XI p. 354,
XIV p. 623, XVI p. 560.

1. *Byssonectria cupulata* Theiss., Ann. Mycol. (1910) p. 458, c. ic. 4849
— Peritheciis dispersis v. dense gregariis, minutis, globosis, fla-
vo-aurantiis, typice byso albido compactiusculo cupulam hemi-
sphæricam efformanti singulis insidentibus, 170-240 μ . diam.; ascis
cylindraceis, apice plerumque paullo incrassatis, p. sp. 38-48 \times 5
(apice usque ad 8 μ . cr.), octosporis, supra rotundatis, brevissime
pedicellatis; sporidiis hyalinis, levibus, distichis v. oblique mono-

stichis, septo delicato, non constrictis, ellipsoideis, 6,5 ~ 3; sporulis hyalinis, continuis, ellipsoideis, biguttulatis, rotundatis, 5-6 ~ 3.

Hab. in stromate Sphæriacearum et Valsacearum, São Leopoldo, Rio Grande do Sul Brasilia (J. RICK).

PECKIELLA Sacc. — Syll. II p. 472, IX p. 944, XVI p. 560, XVII p. 780.

1. **Peckiella hymenoides** Peck, Bull. Torr. Bot. Club XXXIV (1907) 4850 pag 102. — Subiculo tenui, adpresso tomentoso, albo, hymenium hospitis tegente; peritheciis subglobosis, a subiculo plus minusve celatis, e. pallide succineis atro-brunneis; ascis angustis, cylindraceis; 8-sporis, 60-80 ~ 5-6; sporis simplicibus, subfusiformibus, utrinque acutis v. acuminatis, 12-15 ~ 4-5.

Hab. in hymenio Lactarii uidi Fr., Newfane Vermout (Miss G. S. BURLINGHAM). — *Peckiella hymenii* Peck, affinis sed ascis, sporis, subiculo diversa.

2. **Peckiella hymenii** Peck, N. York State Mus. Bull. n. 116 (1907) 4851 p. 28. — Subiculo albo, supra hymenium et lamellas obliteratas plus minusve effuso; peritheciis minutis, globosis, in subiculo subimmersis, numerosis, pallide melleis dein ætate obscurioribus; ascis linearibus 240-320 ~ 7-10; sporidiis monostichis, fusoideis utrinque acutatis, hyalinis, 40-45 ~ 6,5-7, cruciatis massulas albas irregulares formantibus.

Hab. in hymenio Lactarii vellerei, Wading River, Suffolk Co. Amer. bor.

3. **Peckiella Camphorati** (Peck) Seaver in Mycologia II (1910), tabula 4852 XXI, fig. 6, *Hypomyces Camphorati* Peck, New York State Mus. Bull. 1906 n. 105, p. 23. — Subiculo tenui, effuso, hymenium obliterante, flavo; peritheciis numerosis, minutis, subiculo immersis, ostiolo emergente brunneo; ascis longissimis, 120-150 μ . long. (parte sporif.) octosporis; sporidiis monostichis, oblongo-fusoideis, continuis, acutis v. interdum utrinque cuspidatis, 12-15 ~ 4-5.

Hab. in hymenio Lactarii camphorati, Port Jefferson, Suffolk Co. Amer. bor.

4. **Peckiella lateritia** (Fries) R. Maire, Not. Myc., Ann. Myc. v. IV (1906) p. 331. — Ita vocanda *Sphæria lateritia* Fries seu *Hypomyces lateritius* (Fr.) Tul. — Syll. II, pag. 468 — a quo, teste Maire l. c., non differunt *Sphæria deformans* Lagg. — Syll. II, pag. 475 [sub *Hypomyc.*] et *Hypomyces Vuilleminianus* Maire — Syll. XVI, p. 560 [sub *Peckiella*].

SELINIA Karst. — Syll. II p. 457, IX p. 943.

1. **Selinia subtropica** Spegazz., An. Mus. Nac. Buenos Aires t. XIX 4854 (1909) p. 404. — Stromate non prominulo matrice dealbata innato, albescente; peritheciis paucis (1-3) stromate infossis, ostiolo fuligineo breviter exerto manifestis, globosis, 0,75-2 mm. diam.; ascis subellipsoideis pedicellatis, parte spor. 150-180 \times 50-90, ped. 50-80 \times 10-15, paraphysatis; sporidiis 2-3-stichis 60 \times 28, crassiuscule tunicatis, levibus, e hyalino subchlorinis.

Hab. in fimo vaccino putrescente in collibus prope Salta Argentina Amer. austr. — *S. pulchrae* (Wint.) Sacc. peraffinis, sporidiis tamen apice non acutatis stromateque pallido non verrucoso recedens.

POLYSTIGMA Pers. — Syll. II p. 458, IX p. 945, XIV p. 625, XVII p. 780.

1. **Polystigma Adenostomatis** Farl. in Eil. et Dearn. Fungi Columb. 4855 (1905) n. 2049. — Peritheciis amphigenis, congregatis, ovoideis, 280 \times 140, folii substantiae decoloratae purpurascenti immersis; contextu aurantiaco; ascis octosporis, elongato-ellipsoideis, 56 \times 16; sporidiis ovoideis, hyalinis, 14 \times 5-6; paraphysibus simplicibus, linearis-clavatis, 3-4 μ . cr. aurantiacis.

Hab. in foliis vivis Adenostomatis fasciculati, S. Matio, California Americæ borealis (C. H. THOMPSON).

2. **Polystigma Haræanum** Sacc., in Ann. Mycol. X (1912) p. 311. — 4856 Stromatibus subcutaneis, hinc inde dense gregariis, minutis, intus et extus amœne roseis, longitudinaliter oblongis v. irregularibus 0,5-1 mm. long., 0,5 mm. latis, epidermide tumidula levi velatis; loculis copiosis, immersis, globosis, minutissimis, 50-60 μ . diam. ostiolis non v. vix visibilibus, pariete minute et tenerrime celluloso, cellulis 4-5 μ . diam.; ascis fusoideis, subsessilibus, apice obtusis lumineque biformato præeditis, 28-32 \times 5,5-6, octosporis, pseudoparaphysibus (ascis immaturis) tereti-fusoidis obvallatis; sporidiis oblique monostichis, oblongo-fusoideis, utrinque obtusulis, saepius 4-guttulatis, 7-8 \times 2,5, hyalinis.

Hab. in culmis emortuis Phyllostachydis sp. in Japonia. Legit et communicavit A. KANESÜKE HARA, 1911.

Sect. 2. Phæosporæ.

SPHÆRODERMA Fuck. — Syll. II p. 459, IX p. 949, XI p. 355, XIV p. 627, XVI p. 562, XVII p. 781 (*).

1. **Sphæroderma microsporum** von Höhnel, Ann. Mycol. III (1905) 4857 p. 327. — Peritheciis superficialibus v. semiimmersis, sparsis, c. 200 μ . cr., sphæroideo-piriformibus, collo 100 μ . cr., nigris; contextu molli, subtenui, obscure brunneo, distincte parenchymatico; ascis numerosissimis, cylindraceis, 60 \approx 5-6, basi longe attenuatis acutatis, octosporis; paraphysibus numerosis, filiformibus; sporidiis obscure brunneis, late ellipsoideis 1-2-guttulatis, 4,5-7 \approx 3,5-4.

Hab. in ligno putri Fagi silvaticæ prope Pressbaum Wiener Wald Austriae.

2. **Sphæroderma texanicum** Rehm, Ascor. Amer. bor., Ann. Myc. 4858 v. III (1905) p. 519. — Peritheciis sessilibus in crustulam nigrescentem effusam arcte congregatis, globulosis, haud papillulatis poro minutissimo pertusis, glabris, modo ad basim hyphis non nullis hyalinis vestitis, mox collabentibus, membranaceis, nigrofuscidulis, 100-150 μ . diam.; ascis cylindraceis, apice truncatis, c. 100 \approx 14, quadri-octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, guttis oleosis parentibus, subfuscis, 12 \approx 6-7, strato mucoso tenui obductis, 1-stichis; paraphysibus ramosis.

Hab. ad lignum putridum, Texas (TRÉCUL 1848, comm. Dr. PAZSCHKE). — Secundum texturam mollem perithecii ad *Hypocreaceas*, subiculo nullo conspicuo ad *Sphærodermatis* subg. *Vittadinula* Sacc. pertinens species, *Collematis* instar crustulam præbet. Proximum *Sphærodermati Belladonne* Tassi, imprimis peritheciis multo majoribus alienum.

3. **Sphæroderma Rickianum** Rehm in Theissen, in Ann. Mycol. V (1907) p. 530 et Ann. Mycol. 1910, p. 461-462 c. ic. — Peritheciis 3-20 in acervulos 1-3 mm. latos, 1 mm. cr., brunneo-nigros, ligno nudo insidentibus dense aggregatis, c. $1/2$ mm. diam., vertice griseo-decoloratis, poro latiuscule pertusis, strato stupposo compactiusculo (ex hyphis brunneis, septatis, 5 μ . cr. efformato) insiden-

(*) Ad pag. 781 vol. XVII (*Sphæroderma aureum*); pro «Peritheciis atro-brunneis» corrigere: «aureo-brunneis».

tibus eoque circum circa, excepto vertice, vestitis, hyphis radian-tibus usque ad 240 μ . longis; ascis recte cylindraceis, supra rotundatis infra breviter pedicellatis, 130-150 \times 13, octosporis; sporidiis obscure brunneis, continuis, fusoideo-ellipsoideis, plano-convexis, utrinque attenuato-rotundatis, 23-26 \times 10-12, strato mucoso angusto cinctis.

Hab. in lignis decorticatis, São Leopoldo Rio Grande do Sul Brasilia. — A genere *Rosellinia* recedit contextu molli peritheciis.

4. **Sphæroderma argentinense** Spegazz., An. Mus. Nac Buenos Aires 4860 t. XIX (1909) pag. 405. — Peritheciis sparsis v. hinc inde laxe gregariis, globosis, 200-250 μ . diam., subiculo tenuissimo concolore parcissimo cinctis; ascis ellipsoideis longiuscule pedicellatis, p. sp. 50-60 \times 30-40, mox diffluentibus, octosporis; sporidiis ellipsoideo-limoniformibus, fuligineis, 20-25 \times 15-16, levibus.

Hab. ad rhachides putrescentes Musæ sapientum, La Plata Rep. Argentina Amer. austr. — *Sph. bulbifero* Berl. affinis species, sporidiis brevioribus crassioribusque tamen distincta.

5. **Sphæroderma epimyces** von Höhnel, Fragm. z. Mykol., Sitzb. k. 4861 Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) pag. 103. — Peritheciis gregariis, globosis, astomis epapillatis, primum flavidis dein sordide brunneolis, circ. 310 μ . diam., primum plus minus immersis dein superficialibus, subliberis; contextu peritheciis crassiusculo, carnosus, flavo, grosse parenchymatico; ascis aparamphysatis, octosporis ovoideo-piriformibus, clavatis, tenuiter tunicatis, supra late rotundatis, basi breviter crasseque stipitatis, 80-92 \times 28-32; sporidiis confertis, unilocularibus, late citriformibus, depresso, sectione subellipsoideis, e pallide griseo-violaceis v. obscure olivaceis opace nigris, utrinque breviter cylindraceo-appendiculatis, saepe angulosis, multiguttulatis, 24-28 \times 13-18 \times 11-12.

Hab. parasitice in stromate Hypomyctis ochracei prope Pressbaum Austriae inf. — *Sph. episphaerio* (Ph. et Pl.) affine sed characteribus peritheciorum sporidiorumque diversum.

6. **Sphæroderma hypomyces** v. Höhnel, Fragm. z. Mykol., Sitzb. k. 4862 Ak. d. Wis. Wien Bd. CXVI, Abt. I (1907) p. 102. — Subiculo arachnoideo, tenui, evanido; peritheciis globosis, liberis vel basi adnatis, astomis epapillatis, sparsis v. confertis, pallide ochraceo-flavis, dein pallide brunneolis, 400-550 μ . diam. extus glabris, levibus v. parce pilosulis (pilis hyalinis 50 \times 2-4); contextu peritheciis crassiusculo, carnosus, flavo, parenchymatico (cellulis usque ad

25 μ . latis); ascis apophysatis, tenuiter tunicatis, clavatis, basi breviter stipitatis, octosporis, 80 \times 16-20; sporidiis distichis v. confertis, griseo-nigris, multiguttulatis, unilocularibus, fusoideis. utrinque obtusis, lateraliter depresso, 20-21 \times 8 \times 7.

Hab. parasitice ad lamellas Lactarii pergameni, prope Pressbaum Austriae inf. — Subiculum arachnoideum saltem partim *Hypomycti* pertinens.

7. *Sphæroderma Wentii* (Koord.) Sacc. et Trott., *Melanospora Wentii* 4863 Koord., Botan. Untersuch. (1907) pag. 172, fig. 11 et tab. XII fig. 18. — Peritheciis hyalinis erostratis, in subiculo effuso arachnoideo sublibere insidentibus, globulosis 250-270 μ . long. et 220-240 μ . latis; ostiolo conico 90-100 μ . longo, apice mutico; ascis 4-8-sporis; sporidiis ellipsoideis, continuis, fuscis, 25-25,5 μ . longis et 15-18 μ . latis.

Hab. in foliis emortuis Fici elasticæ pr. Purworedjo prov. Kedu ins. Java (KOORDERS).

SPHÆRODERMELLA v. Hönel ad int. Fragm. z. Mykol., III Sitzb. k. Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) pag. 105, *Sphærodermatella* Seaver, Mycologia I, p. 182. Dignoscitur a *Sphærodermate* ostiolo setuloso et sporidiis muco obvolutis. — Huc spectant: *Sphæroderma Helleri* (Earle) Sacc. — Syll. XVII, p. 781 — et *Rosellinia Niesslii* Auersw. — Syll. II, p. 270.

CREOSPHÆRIA Theiss., Beih. Bot. Centralbl. Bd. XXVII (1910) Abt. II, p. 396 (Etym. *creas caro et Sphæria*). — Perithecia singula v. in stroma commune juncta, erumpentia, dein libera, basi vix innata, atra, non carbonacea, contextu medio carnoso-molli; ascis cylindracei, 8-sporis paraphysati; sporidia brunnea continua; paraphyses simpliees filiformes. — Genus *Rosellinia* proximum, contextu carnoso stromatibusque compositis recedens; sed verisimilime idem est ac *Sphærodermella*.

1. *Creosphaeria riograndensis* Theiss., l. c. pag. 396. — Peritheciis 4864 erumpentibus, corticis laciinis cinctis, demum liberis, basi breviter innatis, atris, conoideis, 1-1,5 mm. diam., superficie ramosa, levi, contextu sanguineo, carnoso, pariete peritheciali crassiusculo compacto atro; stromatibus compositis, pulvinulos 2-3 mm. latos, pluriloculares (raro strata magis effusa sistentibus) rotundatos, rimoso-rugosos, parce minuteque papillatos, æstate poro umbilicato et perithecia plerumque 3-6 globosa vel applanata 900-1400 μ . diam.

continentes, cortice epidermali communi tectos formantibus; ascis anguste cylindraceis, longissime (usque ad 120 μ .) pedicellatis, p. spor. 88-100 \times 5-5,5; paraphysibus copiosis ezeptatis, filiformibus, 2 μ . cr.; sporidiis octonis, ellipsoideis, 8,5-12 \times 3,8-4,6 v. oblongis 13 \times 3,5, brunneis, rectis, utrinque rotundatis, 1-2-guttulatis.

Hab. ad cortices emortuos, São Leopoldo Rio Grande do Sul Brasiliae.

NIGROSPHÆRIA N. L. Gardner, Univ. California Publ. Bot. v. II (1905) n. 6, p. 179, pl. XVIII (Etym. *niger* ob sporidia atra). — Mycelium parasiticum, ex hyphis parcis albis in contextum subhymeniale matricis penetrantibus formatum. Perithecia sphærica absque ostiolo, e singulo filamento erecto myceliali oriunda, excipulo albo, glabro. Ascii late clavati, a paraphysati; sporidia continua, oblonga, brunnea v. nigricantia. — Huc pertinet *Sphaeria* (*Hypocrea*) *Setchellii* Harkness — Sacc., Syll. XVI, p. 564 (sub *Melanospora*). Verisimiliter genus *Nigrosphæria* a *Sphaerodermate* non satis differt.

MELANOSPORA Corda — Syll. II p. 461, IX p. 950, XI p. 356, XIV p. 626, XVI p. 563, XVII p. 781.

1. **Melanospora rhizophila** Pegl. et Sacc. sp. n. — Peritheciis subsparsis v. gregariis, minutissimis, superficialibus, globulosis, 150-200 μ . diam., in ostiolum cylindraceum, 160 \times 30, apice fimbriatum abrupte tenuatis, hinc phialiformibus, glabris, luce directa nigricantibus, contextu vero tenuiter carnosulo, sordide roseo, peritheciis minute parenchymatico, ostioli prosenchymatico; ascis ovato-oblongis 50-55 \times 20-22 subsessilibus, octosporis, a paraphysatis mox evanidis; sporidiis distichis ellipsoideo-limoniformibus, h. e. utrinque apiculatis, primo brunneis, grosse 1-guttatis, dein fuligineis.

Hab. in radicibus putrescentibus Cucurbitæ *Peponis*, Ferrara, Ital. bor., socia *Fusurii* specie, forte ejusdem status conidiphorus (V. PEGLION). — Affinis *Melanospore vervecinæ*, a qua glabritie et minutie omnium partium statim dignoscitur. Perithecia interdum etiam intra radiculas putres matricis inveniuntur.

GIBSONIA Massee, Ann. Bot. XXIII (1909) p. 336 et Trans. Brit. Mycol. Soc. III (1910) p. 221 (Etym. a prof. H. GIBSON). — Perithecia subglobosa, superficialia, membranacea, olivacea, ostiolo longe cylindraceo apice fimbriato prædicta. Ascii octospori facile dif-

fluentes; sporidia continua brunnea, ellipsoidea, in massam mucosam eructata. — An satis diversum genus a *Melanospora*?

1. **Gibsonia phæospora** Massee, l. c. cum fig. in textu. — Peritheciis 4866 sparsis 1 mm. alt., subglobosis olivaceis glabris, hyphis basi repentibus, in longum ostiolum abrupte desinentibus; contextu parenchymatico ex cellulis polygoniis composito; ascis cylindricis, sporidiis monostichis, ellipsoideis, brunneis, continuis 14-15 × 7-8.

Hab. in massa decomposita Saprolegniarum, rarius in Lancashire Britannia (Prof. H. GIBSON).

HYPOXYLINA Starb., Ascom. Schw. Chaco-Cordill. Exp. Arkiv. f. Bot. Bd. V (1905) p. 29 (Etym. ab *Hypoxylon*, cuius est analogon genus). — Stroma pulvinatum vel pulvinato-effusum, tenue; perithecia acervulatim conjuncta, contextu carnosissime pro-senchymatico nectrioideo; sporidia continua, ellipsoidea, fusca. — *Hypoxylon* primo obtutu in memoriam revocat sed texturâ mollissima, sub lente, si tenuissime præparata, lilacino-vinosa, genus facile Hypocreaceis adscribendum; a *Penzigia* peritheciis semilibericis vel basi tantum conjunctis nec non textura plane differt.

1. **Hypoxylina umbilicata** Starb., l. c. p. 29. — Acervulis peritheciorum stromate basilari coniunctis et insidentibus, sparsis, hemisphaericis vel tuberculatis, denique applanatis, interdum confluentibus et effusis, orbicularibus, 1-2 mm. diam. vel oblongatis, 1-3 × 1/2-2 mm., circa 1 mm. altis, ad basim pilis parcis, fuscis, septatis, 5 μ. crassis obsessis; peritheciis spheroideis, papilla discoidea, profunde nigro-umbilicata ornatis, villo furfuraceo fusco-ferrugineo, deinde lateritio-fusco omnino vestitis, textura carnosa vel vix carnosocoriacea, densissime prosenchymatica vel subparenchymatica, sub lente fusco-nigra, sed tenuissime præparata lilacina, 500-600 μ. diam.; ascis lineariter cylindraceis, sursum obtusatis, longe pedicellatis, 89-101 × 9-10 (p. sp.); sporidiis octonis, monostichis, saepe imbricatis, ellipsoideis, inæquilateralibus, vetustis navicularibus, utrinque acutiusculis, primo hyalinis, biguttulatis, deinde fuscis; paraphysibus parcis, filiformibus, diffluentibus.

Hab. in ramulis aridis arboris « algorobo » nominati ad rio S. Francisco, prov Jujuy Argentina et in ramulis Mimosæ sp., Gran Chaco, Tatarenda Bolivia.

WAWELIA Namyslowsky, Kosmos XXXIII (1908) p. 330; Bull. Ac. Sc. de Cracovie 1908 pag. 597, 6 fig. (Etym. a Monte Wawel).

Cracoviæ, ubi est castrum olim sedes regum polonicorum et ubi fungillus detectus est). — Stromata cylindraceo-conica, plerumque simplicia, alba, carnosa, matrice leviter infixa, demum flavescenti brunneola. Perithecia concoloria in parte media stromatis superficialia, globoso-conica, satis conferta numerosa, stromatis basim et saepe quoque apicem nuda relinquentia; asci cylindracei, paraphysati, 4-spori; sporidia ovoidea, continua, nigricantia, levia. Conidia adsunt. — Genus insigne, habitu *Racemellæ* (*Cordyceps*).

1. *Wawella regia* Nam., l. c. — Characteres generis; stromatibus 4868 gregariis, saepius basim et apicem versus tenuatis, 5-12 mm. alt., 1-2 mm. cr.; peritheciis prominentibus obtuse papillatis, pertuisis, 240-300 μ . diam., hyphis filiformibus conidiophoris confertiusculis ascendentibus vestitis; ascis 60-80 μ . long., apice rotundatis, deorsum sensim tenuatis, paraphysibus multi-cellularibus, duplo longioribus, crassiusculis obvallatis, tetrasporis; sporidiis monostichis, ovoideis, livido-nigricantibus, 6-8 \times 4-6; conidiis singulis v. gregatis acrogenis, achrois, ovoideis, 4-6 \times 2.

Hab. in fimo Cuniculorum Cracoviæ, Polonia.

COLLETOMANGINIA Har. et Patouill., C. R. Acad. Fr. CXLII (1906) p. 224-226, Bot. Centralbl., CI (1906) n. 24, pag. 632 (Etym. a coll. COLLET et MANGIN). — Stroma hemisphæricum, cavum, magnum, superficie alveolato-excavatum, fere *Morchellæ* ad instar, carnosum, pallidum; perithecia in fundo areolarum immersa, phialiformia, collo longiusculo in ostium vix emergens deliscentia, carnosa, nigricantia; asci filiformi-paraphysati, cylindracei, apice jodo colorati, octospori; sporidia ovoidea, continua, nigricantia. — Genus anceps inter *Xylariaceas* moliores et *Hypocreaceas* medium, habitu vero *Helvellacearum*.

1. *Colletomanginia paradoxa* Har. et Pat., l. c. p. 224. — Characteres generis; stromate 17 cm. diam., alveolarum cristis 2-3 cm. alt.; peritheciis in fundo areolarum ab eis denigrato 3-4 seriatis; ascis 190 \times 20; sporidii 18-24 \times 12-15.

Hab. ad truncos Abietis pectinatae in Afr. orient. britannica.

Sect. 3. Hyalodidymæ.

CHARONECTRIA Sacc. — Syll. II p. 466, IX p. 953, XVI p. 1140, XVII p. 782.

1. **Charonectria succinea** (Rob. et Desm.) Sacc. — Syll. IX p. 953 — 4870 var. **bractearum** Sacc., Ann. Mycol. VI (1908). — A typo vix dif- ferre videtur ascis cylindraceis nec vere clavulatis et loco.

Hab. in bracteis languidis v. emortuis Carpini Betuli, Rigny sur Arroux Galliæ (FLAGEOLET). — Asci 68-80 \times 8; sporidia oblique monosticha, 8,5-11 \times 5-5,5, hyalina, 1-septata non constricta, hyalina; contextus peritheciū fulvo-melleus.

2. **Charonectria fimicola** v. Höhn., Oest. Bot. Zeitschr. LV (1905) 4871 p. 22, Rehm, Ascom. exsicc. n. 1587. — Peritheciis piriformibus 250-300 μ . latis, 400 μ . alt., rostello 165 μ . long., 140 μ . cr. præditis, plerumque omnino immersis et rostello prominentibus, subhyalinis v. flavidio-albis, siccis sordide flavidis, nucleo rubido præditis, parietibus 30 μ . cr., e cellulis parenchymaticis 6-20 μ . cr. constitutis, extus levibus; ascis numerosis, cylindraceis 100-120 \times 5-6, octosporis; sporidiis rectis, monostichis, pallide flavo-aurantiacis, tenui-tunicatis, late ellipsoideis, septatis ibique parum constrictis, extus longitudinaliter striatis, 10-13 \times 5-5,5; paraphysibus paucis filiformibus, 2-3 μ . cr.

Hab. in fimo Damæ vulgaris sub vitro servato ex Sparbacher Tiergarten, Wiener Wald Austriae.

NECTRIA Fr. — Syll. II p. 479, IX p. 955, XI p. 357, XIV p. 628, XVI p. 565, XVII p. 778. — Cfr. v. Höhnel, Ann. Myc. VIII (1910) p. 464.

I. *Eu-Nectria* Sacc.

1. **Nectria tucumanensis** Speg., An. Mus. Nac. Buenos Aires t. XIX 4872 (1909) p. 407, cum icono. — Peritheciis cæspitosis erumpenti-superficialibus sordide rubris coriaceo-carnosulis, stromate paccissimo insidentibus, udis globosis 250-300 μ . diam., ostiolo obscuriore vix papillato ornatis; ascis subfusoideis breviter pedicellatis 90-120 \times 20-40, paraphysatis v. non, octosporis; sporidiis suballantoideis medio septatis, loculis facile secedentibus, hyalinis, 35-40 \times 12-15.

Hab. ad ramos dejectos putrescentes *Anonæ Cherimoliæ* nec non *Celtidum* in sepibus circa Tucumán, Argentina Amer. austr. — Species eximia sporidiorum articulis facile secedentibus ad *Hypocream*, *Bresadolellam* v. Höhn. nec non *Neorehmiam* v. Höhn. præcipue accedens.

2. *Nectria oculata* v. Höhn. Fragm. Mykol. IX in Stzb. k. Ak. d. 4873

Wiss. Wien CXVIII (1909) Abt. I, p. 1475. — Peritheciis gregariis, superficialibus, solitariis v. seriatis, stromate visibili nullo, globosis 400-450 µ. latis, obscure cinnabarinis, e nitidulo subopacis, ostiolo depresso, rotundato 10-12 µ. lato, papilla depressa nitidula, e rubro-brunneo nigricante 180 µ. lata prædicto; membrana peritheciæ parenchymatica 35-45 µ. cr.; paraphysibus parcis, filiformibus, diffluentibus; ascis tunica tenuissima prædictis, cylindraceis, octosporis, 80-86 ≈ 6-8; sporidiis recte v. oblique monostichis, hyalinis, levibus, elongato-ellipsoideis, sæpe lateraliter depresso-rectis, apice vix angustatis obtusulis, plasmate indistinte quadripartito, ad septum medium tenuem non constrictis, 12-18 ≈ 5,5-6.

Hab. in ramis *Albizziæ moluccanæ* (?) in horto bot. Buitenzorg in ins. Java. — *N. mammoideæ* Plowr. affinis.

3. *Nectria vicina* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) 4874

p. 408. — Peritheciis globosis 180-200 µ. diam. aurantiacis, minute papillato-ostiolatis, erumpenti-superficialibus, 3-5-gregariis, carnosulis; ascis obclavatis, brevissime pedicellatis, 90-100 ≈ 20, paraphysibus grosse articulatis cinctis; sporidii cylindraceis, rectis v. vix inæquilateralibus, non constrictis, hyalinis, 30 ≈ 10.

Hab. ad ramos emortuos Serjaniae cujusdam, Parque Roca, Tucumán, Argentina Amer. austr. — *N. tucumanensi* Speg. similis et facile ejusdem varietatem sistens, peritheciis aurantiacis sporidiisque minoribus et loculis non secedentibus satis distincta.

4. *Nectria diversispora* Petch, Ann. Roy. Bot. Gard. Peradenya III 4875

Pt. I (1906) p. 4. — Peritheciis 0,25 mm. diam., solitariis v. agglomeratis, nullo stromate, rubris, subdiaphanis, granulatis, ostiolis conoideis, ochraceis; paraphysibus linearibus; ascis 80-100 ≈ 10-15; sporidiis oblique monostichis, hyalinis, 11-13 ≈ 4-5, uniseptatis, medio constrictis, strictis, ovatis, apicibus obtusis, loculis sæpe inæqualibus, apicibus sæpe rotundatis.

Hab. in ligno emortuo *Heveæ brasiliensis* et in ramis emortuis *Theæ viridis*, Ceylon.

5. *Nectria Castilloæ* Turconi et Maffei, Atti Ist. Bot. Univ. Pavia 4876 ser. II, p. 332, tab. XII, fig. 2. — Peritheciis compluribus, in

hypostromate carnosulo, pulvinato, pallide flavidō insidentibus, dense aggregatis v. parum discretis, in cæspitulos obscure rubro-carneos, pulvinato-verruciformes, rotundatos, quandoque irregulatiter radiatim subcircularēs erumpentibus, superficialibus, ovatis v. ovato-globosis, 250-300 \times 150-250; contextu pseudoparenchymatico rubro incarnato; ascis e fundo peritheciī irradiantibus, cylindraceis v. subclavatis, apophysatis, 60-80 \times 15-20, octosporis; sporidiis oblique monostichis, rarer subdistichis, ellipsoideis, utrinque rotundatis, medio uniseptatis, 10 \times 3, hyalino-fuscidulis.

Hab. in ramis Castilloæ elasticæ, Mexico Amer. bor. — Adest quoque status conid. formā *Fusarii* sistens; sporodochiis initio cortice tectis, dein erumpentibus, pulvinatis v. pulvinato-verruciformibus, flavidō-albis; conidiis fusoideis, plerumque arcuatis, rarer subrectis, utrinque acutatis, 4-8-septatis, 60-90 \times 4-6, hyalinis, conidiophoris peregrinis suffultis.

6. *Nectria seminicola* Seaver, Mycologia I (1909) pag. 21, tab. II, 4877 fig. 59. — Peritheciis cæspitosis, cæspitibus minutis, confluentibus, interdum seminis superficiem totam occupantibus; peritheciis subglobosis ostiolo minuto papillato præditis, glabris v. subglabris, 250 μ . diam., aurantiacis, senio aureo-flavis v. albidis; ascis clavatis, 40-50 μ . long., octosporis; sporidiis pro more 2-seriatis v. irregulariter positis, hyalinis, 1-septatis, subconstrictis, 10-14 \times 3-3,5.

Hab. ad semina partim putrida Spathyemæ fœtidæ, New York Amer. bor. — Status conidiophorus (*Dendrodochii* spec.): mycelio albo, stromata dein purpurascens formante; conidiophoris erectis, arrecto-ramosissimis apice conidia hyalina ellipsoidea 5-7 \times 2-3, uni-biguttata gerentibus.

7. *Nectria bogoriensis* Bernard, Bull. Dép. Agric. Neerland. XI (1907) 4878 p. 45, fig. 58-61. — Peritheciis hypostromate pulvinato, irregulare, obtuse papillatis, ex hyphis laxe intertextis, carneis formato suffultis, globoso-piriformibus, 200 μ . lat. e viridi rubro-aurantiis, contextu pseudoparenchymatico ex uno cellularum strato denso conflato; ascis octosporis apophysatis, fusoideis, subsessilibus, apice obtusulis, 50-55 \times 8-9; sporidiis ellipsoideo-oblongis, utrinque obtusulis, medio 1-septatis, constrictis, hyalinis, 10-12 \times 4-5.

Hab. in caulinis Vanillæ spec. Tjikeumeuh ins. Javæ. —

Forte species noxia. Dimensiones ex iconibus petitæ..

8. *Nectria fallax* Rick, Fungi austro-amer. III-IV, n. 44, Ann. Myc. 4879 v. IV (1906) p. 309. — Peritheciis aggregatis $\frac{3}{4}$ mm. diam., orbicularibus, luteo-succineis, furfure stramineo conspersis, ostiolis

minutis obtusis vitreis; ascis linearibus 100 \times 10, facile diffluentibus; sporidiis octonis, ovalibus vel cylindraceis, valde inæqualibus 8-16 \times 6-9 biguttulatis, in septo vix compressis, olivaceis, muco tenui obvallatis, exosporio crasso striis longitudinalibus irregulæribus pictis; paraphysibus nullis.

Hab. in ligno frondoso, São Leopoldo, Brasilia. — A ceteris speciebus sporidiis irregulariter striatis dignoscenda.

9. *Nectria betulina* Rehm, Ascom. Amer. bor., Ann. Myc. vol. III 4886 (1905) p. 519. — Peritheciis in stromate flavidulo, 1,5 cm. long., 2-3 mm. lat. per rimas transversas corticis erumpente arcte congregatis, sessilibus, globulosis, haud papillulatis, poro vix conspicuo pertusis, demum patellariformiter collabentibus, dilute carneis, haud nitentibus, scabriusculis, contextu parenchymatico flavidulo 0,3-0,4 mm. diam., membranaceis; ascis cylindraceis, apice rotundatis, 50-60 \times 8-9, octosporis; sporidiis oblongis, utrinque rotundatis, medio septatis, non constrictis, utraque cellula guttam magnam oleosam includente, hyalinis, 9-10 \times 4, 1-stichis; paraphysibus haud visibilibus.

Hab. ad lignum betulinum, Cajuga Lake Flora New York Amer. bor. (Dr. ATKINSON). — *Nectria ochraceæ* forte proxima, sed sporidiis multo minoribus plane diversa.

10. *Nectria leprosa* P. Henn., Engl. Jahrb. XXXVIII (1905) p. 112. 4881 — Cæspitulis 1-2 mm. diam.; peritheciis dense cæpitosis, flavido aurantiis, ovoideis v. subglobosis, papillatis, c. 300 μ . diam., squamis furfuraceis, pallidis vestitis; ascis clavatis, vertice rotundatis, octosporis, 80-100 \times 14-20; sporidiis oblongis, rectis vel curvulis, subdistichis, utrinque obtuse rotundatis, biguttulatis, medio 1-septatis, 24-32 \times 8-10, ex hyalino subflavidulis.

Hab. ad cortices arborum, Amani Usambara or. Africæ centr. (EICHELBAUM).

11. *Nectria amaniensis* P. Henn., Engl. Jahrb. XXXVIII (1905) 4882 p. 112. — Cæspitulis subglobosis, firmis, c. 1-2 mm. diam.; peritheciis dense aggregatis confluentibusque, papillatis, rufo-brunneis; ascis cylindraceo-clavatis, obtusis, 2-guttulatis, medio 1-septatis, constricti sculis, hyalinis, 9-12 \times 4-5; conidiis ellipsoideis, hyalinis, 5-6 \times 2,5-3.

Hab. in ramis siccis Amani Usambara orient. Africæ centr. (EICHELBAUM).

12. *Nectria coccineo-nigra* Starb., Ascom. Schwed. Caco-Cordill. Exp., 4888 Arkiv f. Bot. Bd. V (1905) p. 8. — Stromatibus immersis, erum-

pentibus, pulvinatulo-applanatis, basi paullum contractis, gregariis, interdum confluentibus, intus aurantiaco-luteis, acervulos orbiculatim vel polygone determinatos efficientibus, 1-3 mm. diam.; peritheciis superficialibus, 2-50 densissime aggregatis, plane fere inter se liberis vel basi confluentibus, sphærioideis vel subovoideis, pulcherrime verruculosis, primo aurantiaco-coccineis, distincte obscurius fere nigro-papillatis, deinde rubro-fuscescentibus vel nigropurpureis, 250-300 μ . diam., textura hypocreacea; ascis octosporis forma maxime varia, fusiformibus vel cylindraceo-clavatis, vel (ob sporidia conglobata) oblongatis 57-65 \times 10-12; sporidiis mono-distichis, interdum conglobatis, ellipsoideis, medio septatis, non vel vix constrictis, episporio crasso, distincte oblique et undulatim striato, loculis crasse guttulatis, 12,5-15 \times 6-7,5; paraphysibus nullis (?).

Hab. in ramulis aridis, Gran Chaco, Tatarenda Bolivia. — *N. hematochromæ* Spieg. quam maxime affinis; differt tamen ostiolis, situ et forma sporidiorum; inter Nectrias sporidiis striatis bene distincta.

13. *Nectria asperata* Rehm, Ascom. Exsicc. fasc. 43, n. 1816 et Ann. 4884 Mycol. VII (1909) p. 137. — Peritheciis sessilibus, plus minusve arcte congregatis, globosis, minutissime umbilicatis, poro perspicuo pertusis, mox urceolato-impressis, 0,25-0,3 mm. diam., aurantiaco-rubris v. coccineis, glabris, haud nitentibus, siccis scabris; peritheciis membranaceis e cellulis permagnis, suborbicularibus, 18-20 diam. compositis; ascis fusiformibus c. 70 \times 10, 8-sporis; sporidiis ellipsoideis medio septatis, vix constrictis, utraque cellula magniguttata, hyalinis, 12-15 \times 5(-7), distichis paraphysibus filiformibus 3 μ . lat.

Hab. ad corticem plantæ indetermin., Sao Leopoldo Rio grande do Sul Brasiliæ (THEISSEN). — *Nectr. cinnabarinæ*, *Nectr. Veulottianæ*, *Nectr. illudentis* variis characteribus proxima.

14. *Nectria cæspiticia* Syd., in de Wildem., Flora Bas-Moy. Congo 4885 t. III, fasc. I (1909) Extr. p. 14. — Peritheciis stromate pulvinato 1-2 mm. diam., cæspitosim insidentibus et dense confertis, globulosis, tandem centro leniter collabascentibus, minute papillatis, c. 200 μ . diam. verrucis pro ratione majusculis ochraceis ubique denseque tectis; ascis fusoideo-clavatis, 45-55 \times 18-15; sporidiis distichis, oblongis, utrinque obtusis, medio septatis, non v. leniter constrictis, hyalinis, 24-32 \times 8-12.

Hab. in cortice arboris cujusdam Kisantu Congo Afric. trop.

(VANDERYST).

15. **Nectria cinnabarina** (Tode) Fr. — Syll. II, p. 479 — var. *jara-* 4886

guensis v. Höhnel, Ergeb. Bot. Exp. Südbras. 1901, Denk. k. Ak. d. Wiss. Wien Bd. LXXXIII (1907) Extr. pag. 18. — A typo differt peritheciis 600-650 μ . diam.; sporidiis pallide rubidis, rotundato-ellipsoideis 14-17 \times 6,5-7; ascis 90-98 \times 7-8.

Hab. in cortice rami cujusdam emortui, Jaraguaberg Sao Paulo Brasilia.

16. **Nectria Noackiana** Syd., Ann. Mycol. V (1907) p. 358. — Peri- 4887

theiciis erumpenti-superficialibus, in glomerulos minutos 1-2 mm. latos 5-30 densissime cæspitosis, stromate minuto, hemisphærico, e globoso ovatis v. subpiriformibus, in sicco semper distincte collabascentibus et pezizoideis, cinnabarinis, dein fuscidulis, glabris, ca. 200-300 μ . diam.; ascis cylindraceo-clavatis, apice rotundatis, basi attenuatis, 55-80 \times 10-13, octosporis; sporidiis irregulariter distichis, oblongis vel oblongo-elongatis, utrinque rotundatis, rectis vel leniter inaequilateris, medio 1-septatis, vix constrictis, hyalinis, guttulatis, 17-28 \times 6-9.

Hab. in cortice plantæ scandentis cujusdam, Araraquara, Prov. Sao Paulo, Brasilia.

17. **Nectria lunulata** von Höhnel, Ergeb. Bot. Exp. Südbras. 1901, 4888

Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 19. — Peritheciis hypophyllis in maculis indistinctis insidentibus, variabilibus plus v. minus arte confertis, greges 0,5-3 mm. diam. efformantibus, in stromate superficiali tenui indistincte insidentibus, griseo-brunneolis, membranaceo-coriaceis, irregulariter globosis, ovoideis, minute papillatis, 200-250 μ . diam.; contextu obscure flavo-brunneo, grosse parenchymatico; ascis clavatis, sessilibus, tunica crassiuscula præditis, 70-92 \times 9-10, octosporis, paraphysibus filiformibus numerosis obsitis; sporidiis distichis, fusoideis, utrinque acutatis v. obtusiusculis, minute multiguttulatis, rectis sed plerumque falcatis v. lunulatis, 17-20 \times 3-5.

Hab. in pagina inf. foliorum Smilacis sp., Parnahyba Sao Paulo Brasilia. — Pycnidia immixta (*Zythia* sp.), sporulis numerosis globosis v. elongatis, 1-2 μ . cr. prædita. *Nectria Bonanseana* Sacc. valde affinis.

18. **Nectria ignea** v. Höhn. Fragm. Myk. IX (1909) in Sitzb. k. Ak. 4889

Wiss. Wien CXVIII, Abt. I, p. 1475 (corr. *ignia*). — Hypostromatibus plerumque dense gregariis, superficialibus, rubro-aurantia-

cis, membranaceis, usque ad 250 μ . latis, irregulariter rotundatis, margine radiatim fibroso, ex hyphis plectenchymaticis floccosis 3-5 latis, flavis constitutis; peritheciis 1-5 globosis 105-150 μ . latis, 130-160 μ . altis, flammeis, levibus, glabris, apiculo ostiolari circ. 30 μ . alto, 70 μ . lato; membrana 8 μ . cr. parenchymatica; ascis numerosis fusoideo-conoideis, tenuiter tunicatis, sessilibus, 36-48 \times 5-7, octosporis; sporidiis mono- v. distichis, hyalinis, elongatis, apice obtusulis plasmate quadripartito præeditis, demum bilocularibus, 8-12 \times 1.8-3; paraphysibus tenuiter filiformibus, mucosis.

Hab. in foliis putrescentibus Bambusæ in silvis Tjibodas in ins. Java.

19. *Nectria Marelliana* Speg., An. Mus. Nac. Buenos Aires t. XIX 4890 (1909) pag. 408. — Peritheciis ovatis 150 μ . diam., in stromate dense constipatis e globoso subhemisphæricis 0,5 mm. diam., rubro-fuscis, carnosulis, glabris; ascis cylindraceis, brevissime pedicellatis paraphysibus grosse articulato-cinctis, 100 \times 10, octosporis; sporidiis oblique monostichis ellipsoideis 14-16 \times 7-8, levibus hyalinis, loculis æquilongis superius grosse 1-guttulatis.

Hab. ad thallum vivum Ricasolæ Casarettoanæ, Hornos prope La Plata Argentina Amer. austr. (C. MARELLI). — A *N. lichenicola* (Ces.) Sacc. peritheciis cæspitosis eximie distincta.

20. *Nectria Eichelbaumii* P. Henn., Engl. Jahrb. XXXVIII (1905) 4891 p. 111. — Stromatibus conidiophoris ceraceo-farinosis, albidis, minutis, hyphis ramosis, hyalinis, c. 1,5-2 μ . cr., conidiis subglobosis, hyalinis, c. 2 μ . cr.; peritheciis cæspitose dispositis, ovoideis vel subglobosis, papillatis, rufo-brunneis, c. 150-180 μ . cr.; ascis cylindraceis, obtusis, octosporis, 60-75 \times 4-6; sporidiis subdistichis v. monostichis, fusoideis v. ellipsoideis, obtusis, longitudine obsolete striatis, hyalinis, 8-11 \times 3,5-4.

Hab. in stercore indeterminato in silvis prope Amani, Usambara orient. Africæ centr. (EICHELBAUM).

II. *Dialonectria* Sacc.

21. *Nectria Papilionacearum* Seaver, Mycologia I (1909) p. 62, t. IV, 4892 fig. 7, tab. V, fig. 19. — Peritheciis hypophyllis, sparsis v. gregariis, hyphis mycelii albis basi cinctis, subconicis, lateritio-rubris v. cinnabarinis, 175-200 \times 150-175, contextu grosse celluloso, celulis pro more 8-10 μ . diam.; ascis clavatis, octosporis, 75 \times 10;

sporidiis distichis, infra saepe monostichis, fusoideis, 1-septatis, ad septum constrictis, 15-17 \times 5-6, loculis 1-pluriguttulatis.

Hab. in foliis *Lespedezae* et *Rhynchosiae*, socia *Parodiella*, Missouri et Carolina infer. Amer. bor.

22. *Nectria callispora* v. Höhn., Sitzb. k. Ak. d. Wiss. Wien CXVIII, 4898 Abt. I (1909) pag. 295, cum icon. — Peritheciis brunneis, opacis glabris, globosis, minute papillatis 400-450 μ . diam. sparsis vel 2-3-approximatis non immersis stromate destitutis; contextu ex cellulis globoso-polygoniis 5-6 μ . diam. formato; paraphysibus copiosis filiformibus dein deliquescentibus; ascis 7-8-sporis, 100-120 \times 22-28, raro tetrasporis et tunc 90 \times 13, clavatis, apice rotundatis deorsum sensim tenuatis; sporidiis ellipsoideis, medio septatis, non constrictis, 2-4-guttulatis longitudinaliter albo-striatis, 20-25 \times 12, hyalinis (in glycerina violaceo-griseis), quaternis oblique monostichis, octonis distichis.

Hab. in cortice vivo *Albizziæ moluccanæ* in horto bot. Buitenzorg ins. Javæ. — A speciebus sporidiis striatis præditis bene distincta.

23. *Nectria Theobromæ* Massee, Kew Bulletin (1908) p. 218 et ap. 4894 Bancroft Handb. Diseas. West Ind. Plants 1910, p. 23; Howard West. Ind. Bull. v. II, p. 200; Stockdale, West. Ind. Bull. v. IX, p. 171. — Peritheciis gregariis v. sparsis, superficialibus, ovoideis, levibus, hyphis aurantiacis præditis, rubris, ostiolo minuto parum prominenti, 500 μ . altis; ascis cylindraceis, pedicellatis, octosporis; paraphysibus septatis, hyalinis, apice leniter incrassatis, 3 μ . cr.; sporidiis oblique monostichis, hyalinis, ellipsoideis, uniseptatis, ad septum leniter constrictis, 28-30 \times 8-10.

Hab. ad ramos *Theobromæ Cacao* quos valde lædit, Grenada, Trinidad, Dominica, St. Lucia, St. Vincent Americæ centr.

24. *Nectria Strasseri* Rehm, in Strasser Verh. zool.-bot. Ges. Wien LVII (1907) p. 308. — Peritheciis gregariis, sessilibus globulosis, vix papillulatis, subhyalinis, glabris, ad basim hyphis nonnullis filiformibus, hyalinis, c. 20-25 \times 3, obsessis, parenchymatice hyalino-contextis, 120-150 μ . diam., siccis pezizellæ ad instar urceolatis, dilute flavidulo-succineis; ascis clavatis, tenerrimis, 30-35 \times 5, octosporis; sporidiis clavatis, medio septatis, utrinque biguttulatis, ad septum non constrictis, hyalinis, 6-8 \times 2-5; paraphysibus distinctis tenerrimis, filiformibus.

Hab. ad caules siccis *Menthæ silvestris* in monte Sonntagberg Austriae inf. (STRASSE). — *N. inconspicua* Starb. affinis

sed præcipue differt sporidiis minoribus. Socia adest etiam *N. fuscidula* Rehm.

25. ***Nectria saccharicola*** Speg. — Syll. XIV, p. 634 — var. **Acan-** 4896
thaceæ Rehm, Ascom. Exsicc. fasc. 43, n. 1815 et Ann. Mycol.
- VII (1909) p. 137. — Peritheciis sessilibus, primitus conoideis, mox urceolatis, minime papillulatis, glabris, dispersis, interdum 2-3 arce congregatis, dilute roseolis v. subcarneis, interdum aurantiaco-flavis, parenchymatice contextis, 0,15-0,2 mm. diam.; ascis fusiformibus 60-65 \times 10, 8-sporis; sporidiis ellipsoideis, utrinque acutatis, medio septatis, utraque cellula biguttata, hyalinis, 12 \times 5, distichis; paraphysibus nullis.

Hab. ad caules Acanthaceæ, São Leopoldo Rio Grande do Sul Brasiliæ (RICK).

26. ***Nectria pezizoides*** Kirschst., Verh. Bot. Ver. Brandenb. XLVIII 4897 (1906) pag. 58. — Peritheciis solitariis v. laxe gregariis, globosis, ostiolo infundibuliformi donatis, rubro-miniatis, extus albo-sulphureis, dein discoideo-collabescentibus et pallide flavis, 300-400 μ . diam.; ascis numerosis, fusoideis, supra depresso-depressis, crasse tunicatis, sessilibus, octosporis, 50-60 \times 6-7; sporidiis oblique monostichis, ellipsoideis, utrinque rotundatis, medio septatis non constrictis, loculis uni-guttulatis, hyalinis, 12 \times 6; paraphysibus paucis, brevibus.

Hab. in ligno pineo putri prope Gross-Behnitz Germaniæ.

27. ***Nectria obscura*** Rehm, Ann. Mycol. V (1907) p. 543. — Peritheciis gregariis, sessilibus, fere semiglobosis, glabris, poro perspicuo pertusis, contextu parenchymatico molli, subfuscō, 120-150 μ . diam., vix visibilibus; ascis cylindraceis, interdum subfusiformibus, 80 \times 10, octosporis; sporidiis fusiformibus, medio septatis, cellula superiore latiore, utrinque rotundatis, utraque cellula 1-guttata, hyalinis, 12 \times 5-6, plerumque monostichis; paraphysibus subramosis, tenerimis, septatis, guttulatis, 3-4 μ . latis.

Hab. ad lignum putridum Quercus, Bois d'Escheringen Lorraine (R. MAIRE).

28. ***Nectria modesta*** v. Höhnel, Fragm. z. Mykol., Sitzb. k. k. Ak. 4898 d. Wissensch. Wien Bd. CXVI, Abt. I (1907) p. 106. — Peritheciis superficialibus, sparsis v. pauci-gregariis, ovoideo-piriformibus, 170-250 μ . latis, 240-400 μ . altis, sordide brunneo-flavis, ostiolato-papillatis, papilla rotundata 200 μ . alta, 140 μ . lata; contextu basi indistincte parenchymatico, fibroso-plectenchymatico, collo distincte parenchymatico, basi hyphis flavidis 3-4 μ . cr. vestitis; collo levi; paraphysibus numerosis, filiformibus; ascis tenuiter tu-

nicatis, cylindraceis v. subclavatis, 90-100 \approx 6-8, octosporis; sporidiis monostichis v. subdistichis, raro distichis, bilocularibus, vix constrictis, elongatis, utrinque rotundatis, omnino granulato-striatis, violaceo-brunneis, biguttulatis, 9-12 \approx 4-5.

Hab. in ligno duro *Betulae* prope Pressbaum et in ligno putri *Carpini* prope Untertullnerbach Austriae inf.

29. *Nectria coccinea* (Pers.) Fr. — Syll. II, p. 481. — var. *platy-* 4900 *spora* Rehm, Ascom. Exsicc. fasc. 43, n. 1813 et Ann. Mycol. VII (1909) p. 137. — Sporidiis medio septatis, oblongis, utrinque valde rotundatis, utraque cellula magni-guttata, ad septum demum subconstrictis, hyalinis, 12-14 \approx 8-9.

Hab. in cortice arboris ignotæ, São Leopoldo, Rio Grande do Sul Brasiliæ (RICK). *Nectr. compressæ* videtur etiam proxima.

30. *Nectria sakensis* P. Henn., in Voeltzkow Reise Ostafrika III 4901 (1908) p. 28, tab. III, fig. 20. — Peritheciis cæspitosis v. sparsis, subglobosis, fusco-papillatis, coccineis verruculosis, 180-200 μ . d.; ascis fusoideo-clavatis apice obtusiusculis, octosporis 45-65 \approx 8-12; sporidiis oblique monostichis v. subdistichis, oblongis, obtusis, uniseptatis, vix constrictis, hyalinis, 12-16 \approx 5-6.

Hab. ad corticem arborum, Sakana Madagascar. — *N. sanguinæ* Sib. et *N. episphaeriae* (Tod.) affinis sed peritheciis verruculosis, sporidiis majoribus etc. diversa.

31. *Nectria congensis* Syd., in De Wildem., Flora Bas- et Moy.- 4902 Congo t. III, fasc. I (1909) p. 14. — Peritheciis sparsis v. sèpius 2-15 cæspitosim aggregatis, stromate nullo, globosis, non collabescentibus, 200-250 μ . diam., minutissime papillatis, rufo-ferrugineis, minute verrucosis; ascis fusoideis v. cylindraceis, 50-75 \approx 7-13, octosporis; sporidiis oblique monostichis v. distichis, ellipsoideo-oblongis, utrinque leniter attenuatis, medio septatis non constrictis, hyalinis, 14-18 \approx 5-6,5.

Hab. in cortice arboris cuiusdam, Kisantu Congo Africæ trop. (VANDERYST).

32. *Nectria lucida* v. Höhn., Sitzb. k. Ag. d. Wiss. Wien CXVIII 4903 Abt. I (1909) p. 298. — Peritheciis solitariis v. cæspitulosis, 500 μ . diam., initio lète cinnabarinis, dein coccineis demum brunneorubris, glabris, nitidis, globosis, non collabescentibus, minute saturatiis papillatis et areolatis, contextu ex cellulis 3-4 μ . diam., solidiusculis formato; ostiolo 16 μ . lat.; paraphysibus paucis diffluens; ascis cylindricis octosporis, 110 \approx 7; sporidiis monostichis el-

liptico-fusoideis rectis curvulisve, utrinque obtusulis, hyalinis, medio septatis non constrictis, levibus, quadriguttulatis, 12-16 \times 6.

Hab. in ramis vivis prope Tijbodas insulae Javae. — Præcipue peritheciis nitentibus distincta species. In sporidiis punctum atrum ad extremitates septi conspicitur.

33. *Nectria Inocarpi* Patouill., Bull. Soc. Myc. Fr. XXII (1906) p. 58. 4904

— Peritheciis superficialibus, solitariis v. gregariis, stromate nullo, globosis v. ovoideis, papillatim ostiolatis, minutis, 250-300 μ . diam., collabescentibus, obscure rubris, superficie tuberculis obtusis 30-45 μ . altis præditis, contextu cellulis angulato-ovatis, 15-18 μ . diam., aurantiacis formato; sporidiis hyalinis, ellipsoideis, utrinque obtusis, 1-septatis, medio vix constrictis, 12-15 \times 6-7.

Hab. in fructibus putrescentibus inter silvas Inocarpi edulis, Tahiti Polynesia.

34. *Nectria imperspicua* v. Höhnel, Ergeb. Bot. Exp. Sübras. 1901, 4905

Denk. k. Ak. Wiss. Wien Bd. LXXXIII (1907) Extr. p. 18. — Peritheciis solitariis, e flavo pallide brunneolis, globosis, ostiolo papillatis, carnosis, circ. 180 μ . cr.; contextu minute parenchymatico; ascis clavatis, supra attenuato-acutatis, circ. 50 \times 6-9, octosporis; paraphysibus paucis v. nullis; sporidiis hyalinis, bilocularibus, plerumque submonostichis, elongatis, utrinque fere fusoideo-angustatis, utrinque obtusulis, medio non constrictis, rectis v. leñiter curvulis, 11-12 \times 2,5-3.

Hab. parasitica in Panico piloso inter conidia Ustilaginoideæ usambarensis, Barra Mansa in districtu urbis Itapecirica Sao Paulo Brasilia.

35. *Nectria lophiostomacea* Starb., Ascom. Schwed. Chaco-Cordill. 4906

Exp., Arkiv. f. Bot. Bd. V (1905) p. 9. — Peritheciis sparsis v. nonnullis, gregariis, superficialibus, primo fere hyalinis, sphaeroides, deinde pallide ochraceis, collabescentibus, medio saepissime ostiolo longitudinali compresso, obscuriore costatis, glaberrimis, textura membranacea, intricatim prosenchymatica, cellulis indistinctis, mycelio hyalino, tenuissime crustaceo cinctis, 75-90 μ . diam.; ascis octosporis, clavatis, sessilibus, sursum acutiusculis, 35,5-38 \times 9-10; sporidiis distichis, primo 4-guttulatis, deinde medio-septatis, cylindraceo-fusoideis, utrinque obtusis, hyalinis, 14-15 \times 3,8-4,5; paraphysibus nullis.

Hab. ad caules Equiseti, Quinta pr. Laguna de la Brea prov. Jujuy, Argentina. — Peritheciis minutissimis, siccitate (?) lophiostomaceis prædistincta species.

36. *Nectria episphaeria* (Tode) Fr. — Syll. II, p. 497 — var. *gregaria* 4907

Starb., Ascom. Schwed. Chaco-Cordill. Exp., Arkiv. f. Bot. Bd. V (1905) p. 9. — Peritheciis gregariis, interdum cæspitulose aggregatis, interdum nonnullis solitariis, e sphærioideo compressis vel umbilicatum collabescientibus, sanguineis; ascis cylindraceo-clavatis, 75 ~ 100 ~ 10-12; sporidiis superioribus distichis, inferioribus monostichis, ellipsoideis, vix medio constrictis, 15-18 ~ 6-7.5.

Hab. supra Pyrenomycetes (?), Santa Anna pr. Tarija. — A *Nect. episphaeria* et ejus varietatibus magnitudine ascorum et sporidiorum differt; a *N. Leptosphaeria* Niessl sporidiis latioribus, peritheciis gregariis.

37. *Nectria sphæricola* Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4908

(1908) p. 128. — Peritheciis dense cæspitosis sed non confluentibus, globosis, 75-100 µ. diam., glabris, nitidulis, succineo-rubris, membranaceo-carnosulis; ascis fusoideis apice truncatis 60 ~ 10-15; sporidiis ellipsoideis uniseptatis, non constrictis, levibus, hyalinis 16 ~ 8, primo 2-3-guttulatis dein diblastis.

Hab. in stromatibus Pyrenomycetum plurimorum ad ramos dejectos putrescentes Ilicis paraguariensis prope Campo das Cuias Rep. Argentina Amer. austr. — Notis plurimis *N. episphaeria* accedens sed bene recteque distincta.

38. *Nectria Melanommatis* Syd., Hedwigia XLIX (1909) pag. 79. — 4909

Peritheciis in stromatibus vetustis Melanommatis plerumque segregatim insidentibus, mox sparsis, mox dense aggregatis, globosis, 200-275 µ. diam., coccineis, vix papillatis, profunde collabentibus, minute granulato-verruculosis; ascis cylindraceo-clavatis, octosporis, 50-70 ~ 8-11; sporidiis ellipsoideis, utrinque rotundatis, medio 1-septatis et constrictis, levibus, hyalinis vel hyalino-brunneolis, 11-15 ~ 5-7.

Hab. in stromatibus vetustis Melanommatis Cæsalpiniaæ ad ramos Cæsalpiniaæ cearensis, Para America austr. (C. F. BAKER).

39. *Nectria Bakeri* Rehm, Ann. Mycol. VI (1908) p. 319. — Peritheciis gregariis, sessilibus, ovoideis, vix papillulatis, carneo-rubris, glabris, oculo nudo vix visibilibus, contextu parenchymatico flavidulo, ca. 100 µ. diam.; ascis clavatis, tenerrimis, 40-42 ~ 6-8, octosporis; sporidiis ellipsoideis, medio septatis, constrictisque, utraque cellula biguttulata, hyalinis, 7-8 ~ 3, distichis; paraphysibus filiformibus, vix conspicuis.

Hab. parasitica in mycelio Meliolæ paginam superiorem fo-

liorum Cassiæ Hoffmannseggiæ incolentis, Paræ Brasiliæ (BAKER). — Subaffinis *N. viliori* et *N. pipericola*.

III *Lepidonectria* Sacc.

40. ***Nectria chilensis* (Speg.) Sacc. et Trott., *Lepidonectria chilensis* 4911**
 Speg., Fungi Chilenses (1910) pag. 97, cum icon. — Peritheciis numerosis latiusculæ gregariis superficialibus sublenticularibus acutiusculæ papillato-ostiolatis, minutis, melleo-corneis, superne glabris, ambitu squarruloso-hirtis, 100-150 μ . diam.; ascis subclavatis brevissime pedicellatis, a paraphysatis, 70 \times 10-12, octosporis; sporidiis oblique distichis, fusoideo-navigularibus, mediocribus, 1-septato-constrictulis, grosse 2-4-guttulatis, hyalinis, 24-25 \times 4-4,5.

Hab. in pedunculis emortuis putrescentibus Lobeliae Tupæ prope Ciudad de Valdivia, Chile Amer. austr.

41. ***Nectria tremelloides* Ell. et Ev., Journ. of Myc. II (1886) p. 121. 4912**
 Seaver in Mycologia I (1909) pag. 53, t. V, f. 3. — Peritheciis gregariis, subglobosis, grosse furfuraceis, aurantiacis, dein pallide flavidantibus, circ. 300 μ ., prope basim mycelio parco albido cinctis; ascis clavatis, 50 \times 7; sporidiis monostichis v. supra partim biseriatis, hyalinis, fusoideis, 1-septatis, levissime constrictis, 9-13 \times 3-4.

Hab. in cortice Salicis emortuæ, Louisiana, Canada (LANGLOIS).

42. ***Nectria grammicospora* Ferd. et Winge, Botan. Tidsskrift XXIX 4913 (1908) pag. 11, tab. I, fig. 3. — Peritheciis stromate pulvinato, usque ad 4 mm. diam., primo immersis, dein erumpentibus, confertis, basi modo insculptis, facile secedentibus, ellipsoideo-subglobosis, 300-350 \times 200-250, textura carnosulo-membranacea, pallide ochraceis, oculo nudo, præsertim basi, albido-furfuraceis, papilla minutissima nuda instructis; vestimento sub vitro e cellulis subrotundatis, 10-15 μ . diam., hyalinis, laxe junctis, hinc inde in squamulas quasi acervatis, composito; ascis juvenilibus fasciculatis, sursum truncatis, subsessilibus, maturis valde elongatis, indeque pedicellatis, clavatis v. oblongo-ellipsoideis, parte sporif. 35-60 \times 8,5-10; sporidiis octonis, distichis v. inferne monostichis, oblongo-ellipsoideis, utrinque rotundatis, nonnullis subinæquilateralibus, ad septum non constrictis, maturis distincte longitrosum striatulis, 12-14 \times 5, singulatum hyalinis, gregatim brunneo-translucidis.**

Hab. ad ramum corticatum in insula St. Thomas Indiæ occ. (RAUNKIAER). — Status conidiophorus *Dendrodochii* sp. sistit.

43. *Nectria subbotryosa* v. Höhnel, Ergeb. Bot. Exp. Südbras. 1901, 4914

Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 20.
 Peritheciis numerosis in stromate obscure flavo gregarie insidentibus, greges 1-3 mm. long., flavo-citrinis, globosis 300-360 μ . diam., extus farinoso-squamulosis, squamulis late adnatis plerumque obtusis 65 \times 50; paraphysibus filiformibus, numerosis; ascis clavatis, sessilibus, octosporis, 48-55 \times 7; sporidiis submonostichis v. distichis, hyalinis, ellipsoideo-elongatis, utrinque attenuatis, obtusis, ad septum non constrictis, 12-15 \times 4-5.

Hab. in cortice arboris emortuæ cujusdam, Jaraguaberg Sao Paulo Brasilia. — *Nectr. botryosæ* P. Henn. affinis sed differt peritheciis sporidiisque majoribus.

44. *Nectria luteo-coccinea* v. Höhnel, Sitzb. k. Ak. d. Wiss. Wien 4915

CXVIII, Abt. I (1909) p. 299. — Peritheciis subgregariis v. sparsis vegetis diaphanis partim flavis partim latae rubris, globosis 2-300 μ . diam., squamulis 100 \times 80 rubentibus v. saepius flavis v. versicoloribus conspersis, ostiolo 44 μ . diam., papilla ex cellulis minutis concentricis formata; peritheciis et squamularum contextu ex cellulis globoso-polygonis 20 μ . diam. composito; paraphysibus paucis latiusculis; ascis clavatis sessilibus, 76-88 \times 9-12, raro tetrasporis; sporidiis monostichis v. subdistichis ellipsoideis utrinque obtusis hyalinis plerumque quadriguttulatis obsolete uniseptatis, 10-13 \times 5-5,5.

Hab. in ligno putrescenti in Horto bot. Buitenzorg ins. Javæ.

45. *Nectria Manihotis* Rick in Theiss. Ann. Mycol. (1910) pag. 459, 4916

cum ic. — Acervulis stromaticis erumpentibus, mox superficialibus, 1,5-2,5 mm. latis, 0,8-1,4 mm. cr., griseo-albidis; peritheciis stromati insidentibus, flavidulis, dense aggregatis, globoso-ellipsoideis, extus floccoso-squamulosis, 250-340 μ . diam., ipsa cavitate peritheciali c. 170-240 μ . diam. v. 220-240 \times 160, poro pertuso; ascis cylindraceis, breviter pedicellatis, supra rotundatis parte sp. 54-58 \times 6,5-7,5; sporidiis ellipsoideis, hyalinis, oblique monostichis v. distichis, 4-guttulatis, septo medio delicatissimo, non constrictis, 10-13 \times 5, utrinque angustatis.

Hab. in ramis emortuis Manihotis in Brasilia.

IV. *Hyphonectria* Sacc.46. *Nectria byssotecta* Rehm, Ann. Mycol. VII (1909) p. 539. — 4917

Peritheciis in maculis pseudostromaticis orbicularibus, convexulis,

3-8 mm. diam. arctissime congregatis, hyphis hyalinis, septatis, fragilibus, 4-5 μ . cr., coarctatis et obtectis, globulosis, succineis, poro vix conspicuo pertusis, 0,15 mm. diam., flavidulo-parenchymatice contextis, siccis urceolatis; ascis clavatis, tenerrimis, 65-70 \times 8-9, 8-sporis; sporidiis medio septatis, haud constrictis, utraque cellula guttas oleosas 2 magnas includente, demum ?3-septatis, hyalinis 10-12 \times 4-5, distichis; paraphysibus?

Hab. in cortice *Anacardii*, Parà Brasiliæ (C. F. BAKER). — Occurrit una cum *N. Anacardii* P. Henn.

47. **Nectria zonata** Seaver, Mycologia II (1910) p. 180, f. 1, t. XXX, 4918
 fig. 1-5. — Peritheciis mycelio radiatim effuso insertis in zonas concentricas dispositis et spatium vacuum centrale relinquenter; conidiophoris ex mycelio oriundis, verticillato-ramosus, ramulis ultimis deorsum incrassatis; conidiis catenulatis fusoideis 10-12 \times 5 intus granulosis et sèpe superficie minutissime asperulis; peritheciis copiosis pallide aurantiis v. carneis senio obscurioribus, interdum filamentis mycelii conspersis et tunc albidis; ostiolo prominenti rarius in sicco collabescente; ascis clavatis, octosporis; sporidiis distichis v. varie congestis, late fusoideis inaequilateris, uniseptatis leviter constrictis, loculo inferiore paullo angustiore, intus minute guttulatis, hyalinis 17-18 \times 8-9.

Hab. in calidariis Horti botanici New York ad ollarum superficiem, Amer. bor.

48. **Nectria æmulans** Rehm, Ann. Mycol. VII (1909) pag. 539. — 4919
 Peritheciis in mycelio tenuissimo hypharum mox evanido sessilibus, plerumque arcte congregatis, primitus globosis, mox cupuliformibus, dilute flavo-albidulis, papillula minima subfuscata, 0,2-0,25 mm., parenchymatice hyalino-contextis, hyphis hyalinis, subramosis, curvatis, obtusis, septatis, c. 50 \times 4 obtectis; ascis cylindraceis 90 \times 10, octosporis; sporidiis fusiformibus, utrinque subobtusatis, rectis, medio septatis, haud constrictis, hyalinis, 14-15 \times 4-4,5, monostichis; paraphysibus nullis.

Hab. ad stipitem Filicis, São Leopoldo Rio Grande do Sul Brasiliae (RICK S. J.) — *Nectria suffulta* B. et C. affinis sed diversa. *Habitus Hypomyces* sp.

49. **Nectria hæmatites** Syd., Deutsche Zentral-Afrika Exped. (1907- 4920 1908) II Bd. pag. 98. — Peritheciis sparsis v. sèpius gregariis, sine stromate, hemisphaericis, c. 300-500 μ . diam. levibus, sanguineis, poro minutissimo, in sicco valde collapsis et applanatis, basi hyphis amœne radiantibus usque ad 250 μ . longis et 3,5 μ . crassis in

siccо flavidis circumdatis; ascis clavatis, a paraphysatis, brevissime stipitatis, 70-110 \times 10-14, octosporis; sporidiis mono-distichis, anguste ellipsoideis v. fusiformibus, medio 1-septatis, non constrictis, hyalinis, 21-28 \times 7-9.

Hab. parasitice supra Algам pleurococcaceam ad cortices, Karrissimbi Africæ trop.

50. *Nectria sphagnicola* Kirschst., Verh. Bot. Ver. Brandenburg 4921

XLVII (1906) p. 59. — Peritheciis plerumque solitariis et stratu albido hypharum radiantibus insidentibus, aurantiacis, globosis, demum profunde discoideo-collabescentibus; ascis cylindraceis, supra rotundatis, breviter pedicellatis, octosporis, 50-70 \times 6-7; sporidiis monostichis, supra quandoque irregulariter dispositis, ellipsoideis, bilocularibus, non constrictis, leniter viridi-flavo tinctis, 8-11 \times 6-7; paraphysibus filiformibus; excipulo sub microscopio flavido; hyphis basi tenuiformibus et subspiraliter contortis, 3 μ . latis.

Hab. in Sphagnis in calidario Horti bot. berolinensis (P. MAGNUS).

51. *Nectria ? versicolor* (Fr. Brig.) Sacc. et Trott., *Sphaeria versicolor* 4922

Fr. Brigantii in Annali dell' Accad. degli aspiranti naturalisti Napoli III ser., 1 vol. (1861) p. 25, tab. I, fig. 1-4. — Peritheciis minutissimis confertis v. gregariis, subglobosis, papillatis, primo amœne virentibus, postea flavis, tandem aureis, subiculo effuso candido insidentibus; ascis et sporidiis non descriptis.

Hab. ad corticem vetustum Ficus Caricæ, Neapoli (O. G. COSTA). — Subiculum e tomento byssaceo contextum subglabratum, superficiale, confluens, sed in individuis solitariis circinatum; perithecia distincta, vix sub oculos cadentia; juniora mollia, adulta duriuscula, papillis (potius tuberculis) ope lentis vitreae inæqualibus conspersa; sursum collabescendo umbilicata, concava; ostiolum prima ætate obsoletum, serius magnum et sapius margine crenato v. angulato dehiscens (Brig. l. c.). — Stirps nectriacea videtur, sed, ignota fructificatione, omnino dubia.

V. *Lasionectria* Sacc.

52. *Nectria Elasticæ* Koord., Botan. Untersuch. (1907) p. 174, f. 12. 4923

— Peritheciis gregariis v. solitariis, superficialibus, e globoso depresso, vertice demum leviter umbilicatis, 140-190 μ . diam., stramineis v. pallide aurantiis, undique brevissime sed distinete albo-pilosulis, pilis 12-17 μ . longis continuis v. 1-septatis, curvatis, ob-

tusis, indivisis, contextu laxiuscule cellulari, sordide stramineo, vix hyalino; ascis cylindraceo-clavatis 35-42 \times 5, deorsum attenuatis, apice (haud incrassatis) obtusatis, 6-8-sporis, paraphysibus filiformibus paucis evanescentibusque intermixtis; sporidiis oblique monostichis vel distichis, oblongis, medio haud constrictis, curvulis 10-13 \times 2,5 plerumque 12-13 \times 2,5, hyalinis medio 1-septatis, utrinque obtusis v. subtruncatis.

Hab. in foliis putrescentibus plantulæ Fici elasticæ cultæ in Horto bot. Berlin-Dahlem ex Java introducta cum conidiis *Colletotrichi Elasticæ* Zimm. quod forsitan status conidicus.

53. *Nectria flavo-ciliata* Seaver, Mycologia I (1909) pag. 54, tab. V 4924 fig. 11, *Nectria bicolor* Ellis et Ev. Proc. Acad. Nat. Sc. Phil. (1893) p. 443, nec *Nectria bicolor* Berk. et Br. — Syll. II, p. 487. — Peritheciis dense gregariis majusculis, 250-300 μ . diam., subglobosis, ostiolo papillato præditis, exclusa areola ostiolari, pilis obtusis, septatis, clavatis, hyalinis sursum vero aureo-sulphureis; ascis clavatis 35-40 \times 7-8, octosporis; sporidiis distichis, fusoideis, 1-septatis, hyalinis, 8-12 \times 2,5-3.

Hab. in ramis emortuis Caryæ, Delaware Amer. bor.

54. *Nectria lactea* Ell. et Morg. ap. Ellis et Everhart, North Amer. 4925 Pyr. p. 110, Seaver in Mycologia, I (1909) p. 54, t. V, f. 5. — Peritheciis minutis 125-200 μ . diam., subglobosis gregariis v. confertis, flavidis, primo pilis densis delicatis, albis præter ostiolum tectis, indeque colorem lacteum fingentibus, demum etate flavidantibus; pilis 2 μ . cr., extus minute granulosis, interdum vero levibus; ascis cylindraceis, octosporis, 40-50 \times 5; sporidiis monostichis, late ellipsoideis, hyalinis, 1-septatis, 5-8 \times 3-5, quaque cellula 1-guttata.

Hab. in fungis vetustis Polyporïs, Stereïs et etiam in ligno putri, New York, Ohio, Florida, Louisiana, Amer. bor.

55. *Nectria Mercurialis* Boud. — Syll. IX, pag. 969 — var. *Urticæ* 4926 Rehm, Oesterr. Bot. Ztschr. (1904) p. 87. — Ascis clavatis 50-60 \times 7-8; sporidiis obtuse fusoideis v. oblongis, utrinque rotundatis, medio septatis, haud constrictis, utraque cellula guttas oleosas magnas 2 includente, 12-17 \times 4-5.

Hab. ad caules siccos Urticæ dioicæ prope Neufriedenheim Bavariae.

56. *Nectria Kickxiæ* P. Henn., Engl. Jahrb. XXXVIII (1905) p. 125. 4927 — Peritheciis subæspitosis, subglobosis v. ovoideis, coccineis, aureo-papillatis, flavidofurfuraceis, 150-180 μ . diam., pilis flexuosis

v. apice incrassatis, septatis, flavidis, c. 30-80 \times 6-10 vestitis; ascis fusoideis octosporis, 45-60 \times 5-7; sporidiis subdistichis v. oblique monostichis, fusoideis, hyalinis, medio 1-septatis haud constrictis, 7-12 \times 2,5-3.

Hab. in ramis emortuis Kickxiæ elasticæ, Victoria Kamerun Africæ centralis. — Quoad statum conidicum cfr. *Leptotrichum Kickxiae*.

57. *Nectria Cannæ* (Speg.) Sacc. et Trott., *Lasionectria Cannæ* Speg., 4928
An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 406. — Maculis nullis sed matrice tota nucida; peritheciis superficialibus, subglobosis, 500-750 μ . diam. siccis irregulariter corrugatis, ostiolo destitutis, melleis, vix puberulis, pilis simplicibus 30-50 \times 3-4 adspersis; ascis cylindraceo-subfusoideis breviter attenuato-pedicellatis 70-80 \times 10-12, apophysatis, octosporis; sporidiis ellipsoideo-subcylindraceis utrinque obtusis non septatis, 14-16 \times 5, loculis æqualibus grosse pluri-guttulatis hyalinis.

Hab. ad culmos Cannæ glaucæ in horto Santa Catalina pr. Buenos Aires, Argentina, America austr. — *Nectria Musæ* Pat. affinis, sporidiis tamen non ovoideis recedens.

58. *Nectria placenta* von Höhnel, Ergeb. Bot. Exp. Südbras. 1901, 4929
Denk. k. Ak. d. Wiss. Wien Ed. LXXXIII (1907) Extr. p. 19. — Peritheciis sparsis, flavo-citrinis, 620 μ . diam., 250 μ . circ. altis, lenticulari-discoideis, centro profunde umbilicatis, circum circa hyphis paucis v. numerosis patentibus in flocculos 120 \times 12-30 congestis vestitis; paraphysisibus numerosis, mucosis; ascis clavatis, octosporis, 60-65 \times 8-10; sporidiis subhyalino-pallescentibus, monovel subdistichis, non constrictis, crassiuscule tunicatis, ellipsoideis utrinque rotundatis, 12-30 \times 5-6.

Hab. ad corticem arboris cujusdam, Jaraguaberg Sao Paulo Brasilia.

59. *Nectria pilosella* Rehm, Oesterr. Bot. Ztschr. 1904 p. 87. — 4930
Peritheciis sparsis, sessilibus, globulosis, subumbilicatis, haud pallulatis, albo-succineis, poro obscuriore, vix conspicuo pertusis, 210-240 μ . diam., pilis crebris, rectis, simplicibus, ad basim dilatata 5 μ . cr., versus apicem plus minusve subacutatis, septatis, hyalinis, 40-60 μ . long., obsexis, parenchymatice contextis; ascis clavatis, octosporis, 50-60 \times 7-8; sporidiis fusoideis v. subclavatis, rectis, medio septatis, haud constrictis, utraque cellula guttam oleosam 1-2 includente, hyalinis, plerumque oblique monostichis, 12-14 \times 3; paraphysisibus tenerrimis, septatis, 2-3 μ . cr.

- Hab.* ad culmum Graminis in valle Kienbach prope Andechs Bavariae sup. — *Calonectria ochroleuca* (Kze. et Fr.) Sacc. affinis.
60. **Nectria Henningsii** Rehm, Hedw. XXVIII (1889) p. 352. — Pe. 4981
ritheciis sparsis vel gregariis, sessilibus, semiglobosis, siccis plerumque patellariformiter collapsis, poro vix censpicio pertusis, ceraceis, aurantiacis, contextu parenchymatico, basi hyphis hyalinis obsessis, 400-800 μ . diam; ascis clavatis, teneris, 50-80 \times 8-10, octosporis; sporidii oblongis, apice rotundatis, rectis, bilocularibus, utraque cellula guttula oleosa magna instructis, hyalinis, distichis, 9-12 \times 4-4,5; paraphysibus parcis, ramosis, J.
- Hab.* ad vaginas foliorum putridorum Musæ in palmario horti bot. regii Berolinensis (HENNINGS). — Ab affinibus *N. importata* Rehm, *vagabunda* Speg., *foliicola* B. et C., satis diversa.
61. **Nectria setosa** Ferd. et Winge, Botanisk Tidsskrift XXIX (1908) 4982
pag. 11, tab. I fig. 4. — Peritheciis superficialibus, discretis vel perpaucis gregariis, initio globosis, dein applanatis siccisque pezizoideo-collapsis, $1/4$ - $1/2$ mm. diam, colore carneo vel aurantiaco, setis sparsis, concoloribus, rigidis, coremiiformibus, inferne crassis, sursum leniter attenuatis varieque fimbriato-divisis (conidiophoris?), usque ad 100 μ . long., praesertim parte inferiori, obsessis; ascis juvenilibus lanceolato-subfusoideis, maturis cylindraceo-clavatis, 50-70 (parte spor.) \times 8-10,5, in pedicellum tenuem, mox secedentem, usque ad 20 μ . longum leniter attenuatis; sporidiis octonis, superne subdistichis, inferne plerumque monostichis, oblongo-ellipsoideis, utrinque rotundatis, ad septum non vel vix constrictis, 12-14,5 \times 5-6, hyalinis.
- Hab.* ad vaginas siccas Musæ (?) spec. in insula St. Thomas Indiæ occ. (RAUNKIAER).
62. **Nectria coccophila** Nomura, Noji Shikenio Hokoku (1901) p. 105 4983
(japonice).
- Hab.* in Aspidioto pernicioso, in quo scarlet disease efficit in Japonia. — An diversa ab aliis *Nectria* speciebus cocomen? 4984
63. **Nectria Anacardii** P. Henn. in Rehm, Ascom. Exsicc. fasc. 42, 1908, n. 1781; Ann. Mycol. VI (1908) pag. 486. — (Nomen nudum).
- Hab.* in cortice Anacardii occidentalis, Pará Brasilie (BAKER).
64. **Nectria fuscidula** Rehm — var. *Menthæ* Rehm, in Strasser Verh. zool. bot. Ges. Wien LVII (1907) p. 308. — (Nomen nudum).

Hab. in caulinibus putrescentibus *Menthæ silvestris* Sonntagberg Austriae inf.

65. *Nectria flammeola* Weese in Jaap, Verh. bot. Ver. Prov. Bran- 4986 denb. LII (1910) p. 184. — (Nomen nudum).

Hab. in cortice vetusto *Populi canadensis* prope Triglitz Germania.

66. *Nectria incrustans* Weese, in Jaap Verh. bot. Ver. Prov. Bran- 4987 denb. LII (1910) p. 184. — (Nomen nudum).

Hab. in ramulis putrescentibus *Alni glutinosæ* pr. Triglitz in Germania.

67. *Nectria consors* (Ell. et Ev.) Seaver, Mycologia I (1909) p. 61. 4988 — Ita vocanda est *Dialonectria consors* Ellis et Ev., *Nectriella consors*, Sacc. Syll. IX, p. 941, nam sporidia, teste Seaver, sunt distincte septata.

CRYPTONECTRIA Sacc. — Syll. II p. 501, XIV p. 639, XVII p. 783.

1. *Cryptonectria Acaciarum* Spegazz., An. Mus. Nac. Buenos Aires 4989 t. XIX (1909) p. 409. — Matrice immutata; stromatibus subglobosis v. confluendo difformibus sparsis v. laxe gregariis, erumpenti-superficialibus intus aurantiacis extus vix granulosis coccineis vel fusco-coccineis; peritheciis immersis globosis 100–120, flavidulis; ascis subfusoideis aparaphysatis, brevissime pedicellatis, 70–85 × 10–12, octosporis; sporidiis subelliptoideis 18–22 × 6–8, ad septum non constrictis, levibus, hyalinis, grosse 1-guttulatis.

Hab. ad ramos *Acaciæ tucumanensis*, *A. ripariæ*, *A. bonariensis*, in dumetis Jujuy, Salta, Tucumán, Chaco, Misiones, Argentina Amer. austr.

NEOHENNINGIA Koord., Botan. Untersuch. (1907) pag. 164 (Etym. *neos* novus et *Henningsia*). — Perithecia superficialia, mycelio stramineo insidentia, subglobosa, submembranacea, subhyalino-straminea, glabra, stroma destituta, apice poro minutissimo perforata, appendiculis cellulosis planis trigonis hyalino-stramineis tenuibus vestita; contextu celluloso tenui. Asci haud fasciculati, cylindracei, aparaphysati, 8–8-spori, plerumque 6–8-spori. Sporidia cylindracea, recta v. leviter curvata, hyalina, medio 1-septata. — Genus nectriaceum, nec eurotiaceum, sed ob appendiculas trigonas peritheciis servari meretur. Aliæ species *Nectriæ* huc transferri debent.

1. *Neohenningia stellulata* Koord., l. c. p. 164, fig. 8. — Peritheciis 4940

sessilibus, 200-250 latis, 90-100 μ . altis, epiphyllis, basi appendicibus stellulatis 80-120 μ . longis, cellulosis, acutis vel acutissimis; ascis 42-44 \approx 5-7; sporidiis fusoideis, utrinque rotundatis v. truncatis, 1-septatis, non constrictis, 12-14 \approx 2,75-3.

Hab. in foliis putrescentibus Fici elasticæ, Purworedjo prov. Kedu, Java, majo 1906 (KOORDERS).

2. **Neohenningsia brasiliensis** P. Henn. in Rehm, Ascom. exs. fasc. 41, 4941 n. 1761, Ann. Mycol. VI (1908) p. 119. — Peritheciis gregariis superficialibus, sessilibus, subglobosis, in sicco subcorneis, rufo-brunneis, madore tenui-membranaceis, parenchymaticis, flavidulis apice poro minuto perforatis, 140-200 μ . diam., appendicibus stellulatis (8-10) radiato-cellulosis, trigonis, obtusis, 60-80 \approx 8-14 vestitis; mycelio ex hyphis flavo-fuscidulis, ramosis, septatis, 2-3,5 cr.; ascis cylindraceo-clavatis v. fusoideis, octosporis, 30-44 \approx 5-7; sporidiis oblique monostichis v. subdistichis, cylindraceis, utrinque rotundatis, curvulis, saepe 3-4-guttulatis, continuis (?), hyalinis, 8-15 \approx 2,5-3.

Hab. in foliis Monsterae sp. in horto bot. Goeldiano, Pará Brasiliæ (C. F. BAKER).

SPHÆROSTILBE Tul. — Syll. II p. 511, IV p. 972, XI p. 359, XVII p. 798.

1. **Sphærostilbe flava** Massee, Bull. Miscell. Bot. Gard. Kew (1909) 4942 p. 340, cum icon. et Diseaseas. cultiv. Plants and Trees (1910) p. 190, cum ic. — Peritheciis ovatis, in cæspitulos suborbicularis dense congestis, læte rubris, verruculosis, ostiolo prominulo papillato ornatis; ascis cylindraceis, sursum abrupte truncatis, 8-sporis; sporidiis hyalinis, ellipsoideis, utrinque acutatis uniseptatis, 15 \approx 6-7.

Hab. in foliis vivis Coffeaæ, quæ valde vexat et necat, morbum dictum « mancha » v. « viruela » efficiens in America centrali et Brasilia. — Status conidicus sistit *Stilbum flavidum* Cooke — Syll. IV, p. 573.

2. **Sphærostilbe Cordiae** Rehm, Ascom. Exsicc. fasc. 42 (1908) n. 1782; 4943 Ann. Mycol. VI (1908), pag. 486. — Peritheciis in mycelio epiphylo orbiculari, arachnoideo, plus minusve conspicuo, albidulo 2-6 arce congregatis, sessilibus, globulosis, poro vix conspicuo pertusis, glabris, carneo-roseis, siccis umbilicato-collapseis, 0,2-0,25 mm. lat., ad basim hyphis brevibus, septatis, hyalinis, sparsis, 5-8 μ . lat. obsessis, parenchymaticae flavo-contextis, plerumque in consortio *Stilbi* fungi conidiophori, erecti, cylindracei v. obovato-cla-

vati, obtusi, sæpe subfasciculati, albiduli, hirtelli, ad clavulam carneo-roseam ovatam 0,15-0,2 mm. lat., 1,2 mm. alti; ascis cylindraceis tenerrimis, sessilibus circ. 60 \times 8, octosporis; sporidiis oblongis, utrinque obtusis, medio septatis et valde constrictis, utraque cellula guttulis oleosis repleta, glabris, hyalinis, 10-12 \times 5-6, mono- interdum distichis; paraphysibus nullis; conidiis *Stilbi* singulis in basidiis hyalinis 2,5 μ . lat., sessilibus, fusoideis, utrinque acutis, rectis, unilocularibus, biguttatis, hyalinis, 9-10 \times 3.

Hab. ad folia *Cordiæ umbra culiferæ*, Parà Brasiliæ (C. F. BAKER). — Status conidicus *Stilbum Cordiæ* (Rehm) Sacc. et Trott. dicendus.

3. **Sphærostilbe Eichelbaumiana** P. Henn., Engl. Jahrb. VXXVIII 4944 (1905) p. 112. — Cæspitulis pulvinatis, c. 1-1,5 mm. diam.; peritheciis aggregatis, subconfluentibus ovoideis, papillatis, pruinosis albidis, c. 200 μ . diam.; ascis cylindraceis, obtusis, octosporis, 60-70 \times 5-5,5; sporidiis oblique monostichis vel subdistichis, ellipsoideis, obtusis, 8-10 \times 4-5, hyalinis, granulato-verrucosis, medio 1-septatis; stromatibus conidiophoris intermixtis, filiformi-clavatis, c. 350-450 \times 100, capitulis hemisphæricis ceraceis, albidis, hyphis 2-2,5 μ . cr.; conidiis ellipsoideis vel subfusoideis, hyalinis, 4-5 \times 2-2,5.

Hab. in ramis corticatis, Amani Ost-Usambara Africæ centr. (EICHELBAUM). — Status conidicus *Stilbum Eichelbaumianum* (P. Henn.) Sacc. et Trott. vocandus.

4. **Sphærostilbe intermedia** Ferd. et Winge, Botan. Tidsskrift XXIX 4945 (1908) p. 12. — Stromate substrato adnato v. margine libero, pedes conidiophorum cingente iisque connato, convexo v. subplano, hypocreoidæ, 2-6 mm. diam., in sicco pallide carneo v. luteo-albo, ostiolis peritheciorum aurantiaco-papillato, humefacto subcinnabarinio; peritheciis stromate immersis, ostiolis obtuso-conicis erumpentibus, ovoideo-subglobosis, 170-200 μ . diam., ascis linearis-cylindraceis, apice rotundatis, 70-85 \times 5,5-7,5, subsessilibus; sporidiis octonis, monostichis, ellipsoideis, utrinque rotundatis, nonnumquam levissime inæquilateralibus, episporio subtiliter granuloso, 1-septatis, ad septum non v. vix constrictis, 10,5-12,5 \times 4,5-5,5, flavidulis; conidiophoris stromati concoloribus, ad typum *Stilbi* formatis, pedicello usque 1 mm. longo; capitulo subgloboso 400-600 μ . diam.; conidiis ellipsoideis, 4-8 \times 2, hyalinis.

Hab. ad corticem arborum in insula St. Thomas Indiae occ. (RAUNKIAER). — Inter *Sph. hypocreoidem* K. et C. et *Sph. Hen-*

ningsii F. et W. media. Status conidicus **Stilbum intermedium** (F. et W.) Sacc. et Trott. nuncupandus.

5. **Sphaerostilbe ochracea** Syd., in De Wildem. Flore Bas- et Moy.- 4946 Congo t. III, fasc. I (1909) Extr. p. 15. — Peritheciis plerumque cæspitosis, 3-15 dense aggregatis, subglobosis, 200-275 μ . diam., dein centro collabescensibus, minutissime papillulatis, leniter rugulosis, ochraceis; ascis cylindraceis, obtusis, 55-70 \times 4-5,5, octosporis; sporidiis monostichis, ellipsoideis, subinde oblongis, utrinque rotundatis v. leniter attenuatis, medio septatis, non constrictis, hyalinis, 10-16 \times 3,5-4,5; fasciculis conidiophoris filiformibus, rigidis 1200 μ . long., 100-130 μ . cr., apice usque ad 300 μ . cr., griseis; conidiis ellipsoideo-oblongis, hyalinis 3-5 \times 2.

Hab. in corticibus, Kisantu Congo Afr. trop. (VANDERYST).

6. **Sphaerostilbe Henningsii** Ferdin. et Winge, Botanisk Tidsskrift 4947 XIX (1908) pag. 12. — Ita nuncupanda *Sph. hypocreoides* P. Henn. 1902 — Syll. XVII, p. 798 — nec Kalchbrenner et Cooke 1880 — Syll. II, p. 515. — Status conidicus **Stilbum Vanderysti** Sacc. et Trott. dicendus.

HYPOCREA Fr. — Syll. II p. 520, IX p. 972, XI p. 361, XIV p. 641, XVI p. 583, XVII p. 800.

1. **Hypocrea argentinensis** Speg., An. Mus. Nac. Buenos Aires t. XIX 4948 (1909) p. 409. — Stromatibus majusculis pezizoideis primo cupulatis dein convexo-expansis, sordide flavescentibus intus albis; peritheciis non prominulis, globosis 90-120 μ . diam., obsoletissime papillato-ostiolatis; ascis cylindraceis, basi breviter attenuato-pedicellatis, 80-100 \times 5, octosporis, aparaphysatis; sporidiis primo ellipsoideis 10-11 \times 5, tunica externa cito diffluente ac loculos e globosos subovatos 4-5 \times 4, hyalinos grosse uniguttulatos liberante donatis.

Hab. ad ramos dejectos putrescentes Patagonulæ americane in silvis secus Rio San Francisco, Jujuy, Rep. Argentina Amer. austr.

2. **Hypocrea bambusella** v. Höhn, Ergeb. Bot. Exp. Südbras. 1901 4949 Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 20. Stromate depresso, indistincte limitato, sicco saepe margine incurvato, rotundato v. elongato, pallide flavo-ochraceo, 1-3 mm. long., 200-250 μ . cr., ostiolis peritheciorum brunneis, saepe laxe v. arcte seriatim dispositis, punctulata; contextu pallido; peritheciis globosis, omnino immersis, papillato-ostiolatis, 160 \times 120; ascis nume-

rosis, cylindraceis, 60 \times 3-4, octosporis, paraphysibus filiformibus obsitis; sporidiis monostichis, hyalinis, in 16 loculos sæpe subcuboideo v. ovoideo 2-4 \times 2-3, secedentibus.

Hab. in culmo putri *Bambusæ*, ad flumen Rio Pardo in districtu S. Cruz Sao Paulo Brasilia.

3. *Hypocrea flavo-minata* Bres. in Theiss., Ann. Mycol. (1910) p. 457. 4950

— Stromate indefinito, irregulari, 0,5-0,6 mm. v. usque ad 1 mm. crasso, obscure et sordide flavido sed nigro punctato-ostiolato, intus e minio sanguineo colorato; strato hyphali peripherico 80-100 μ . cr., obscure rubro et perithecia obtegente; peritheciis laxiusculis 280-380 μ . cr.; — ascis cylindraceis 90-150 \times 5; sporidiis 10-12,5 \times 4, loculo superiori globoso-ellipsoideo, inferiori subcuboideo, constrictis, jam in asco secedentibus.

Hab. in ligneo corticato arborum Brasiliæ.

4. *Hypocrea turbinata* Starb., Ascom. Schwed. Chaco-Cordill. Exp., 4951

Ark. f. Bot. Bd. V (1905) p. 11, fig. 7, a-c. — Stomatibus dense gregariis, superficialibus, basi matrice insculptis, crasse discoideis vel discoideo-turbinatis, disco dilatato, mutua pressione undulatim vel polygone, rarius orbiculariter determinato, superficie inæquilater rugoso vel plicato, obscure cerino, basim versus perpaullum flocculosis, pallide flavescentibus vel fere albidis, 0,5-2 mm. latis, sæpe usque ad 2 mm. latis, sæpe usque ad 2 mm. altis; peritheciis numerosis, stromate plane immersis, sphærioideis, vertice paulum convexulis, 150-200 μ . diam.; ascis octosporis, cylindraceis, sursum truncatis, deorsum longiuscule pedicellatis, circa 100 \times 6,5; sporidiis monostichis, bilocularibus, articulis varia forma, plerumque globoso-cuboideis, interdum fere rhombiformibus vel conico-cylindraceis, superiore sæpe ellipsoideo-cylindraceo, 5-6,3 \times 3,8-5, inferiore sphæroideo 4-5 μ . diam., obscure olivaceis, uniguttulatis; paraphysibus nullis; textura stromatis intricata, hyphis crassis, turgidis, ramosis, flexuosis, composita; parietum peritheciorum subparenchymatica.

Hab. ad trunco, Serra da Chapada, Buriti, Matto Grosso Brasiliæ (MALME). — Forma stromatum insignis species vix ulli adhuc descriptæ affinis.

5. *Hypocrea subsulphurea* Syd., in De Wildem., Flore Bas.- et Moy- 4952

Congo t. III, fasc. I (1909) pag. 15. — Stomatibus tenuissimis, effusis, membranaceo-adnatis, usque ad 3 cm. longis, citrino-sulphureis, margine glabris; peritheciis crebris, omnino immersis, globulosis, luteo-rufis, 120-180 μ . diam.; ascis cylindraceis, brevis-

sime stipitatis, a paraphysatis, 75-100 \times 4-5, octosporis; sporidiis didymis, articulis globoso-cuboideis, subæqualibus, 3-4,5 μ . diam., hyalinis.

Hab. ad trunco, Kisantu Congo, Afr. trop. (VANDERYST). — *Hypocr. sulphureæ* proxima.

6. *Hypocrea simplicissima* Rick et Theiss., Ann. mycol. (1907) p. 457, 4958
f. 1-4. — Stromatibus simplicibus; peritheciis piriformibus, minutis, 250-340 \times 250-300, rubro-brunneis, ætate brunneo-atris, levibus, purpuraceis, siccis rugulosulis, dense gregariis vel plus minusve discretis, poris matricis immediate insidentibus, nectrioideis, poro minutissimo pertusis; ascis anguste cylindraceis, breviter pedicellatis, p. sp. 58-64 \times 4, octosporis; sporidiis hypocreoideis, hyalinis, 6-8 \times 3, uniseptatis, subconstrictis, cellulis ad morem *Hypocreae* inæqualibus, in asco secedentibus.

Hab. supra poros Trametes ochroflavæ, Petropolis Rio Grande do Sul Brasiliæ (J. Rick). — Pro hac specie conditur subg. *Haplocrea* Rick et Theiss., l. c. his notis: Perithecia distincta, stromate fere nullo excepta; asci cylindrici, sporidia octona bilocularia, mox secedendo 16.

7. *Hypocrea fragarioides* P. Henn., Engl. Jahrb. XXXVIII (1905) 4954
p. 112. — Stromatibus subgloboso-pulvinatis, subcoccineis, 1,5-3 mm. diam., fragariiformibus; peritheciis subliberis, hemisphæricis v. ovoideis, papillatis, c. 180 \times 150; ascis cylindraceo-filiformibus, c. 80-95 \times 2,5-5; sporidiorum cellulis 16 subcuboideis, hyalino-flavidulis, 2,5-3,5 \times 2,5-3.

Hab. in ligno putri, Amani, Usambara occ. Africæ centr. (ERCHELBAUM).

8. *Hypocrea fungicola* Karst. — Syll. II, p. 528 — f. *Raduli* v. Höhn. 4955
in Rehm, Ann. Myc. III (1905) p. 227, Ascom. Exsicc. fasc. 34,
n. 1588 (nomen nudum).

Hab. in Radulo Kmetii Bres., prope Tulln Austriae inf.
(v. HÖHNEL).

9. *Hypocrea grisea* Rick, Broteria V (1906) p. 43. — Stromate globose, gregario, depresso, 5 mm. diam., areolato, furfure griseo tecto, intus viridulo; peritheciis $\frac{1}{6}$ mm. diam., ostiolo producto, subviridulo; ascis 80-100 \times 6, membrana tenui, vix pedicellatis; sporidiis oblongis, uniserialibus, 6-10 \times 5, medio septatis, constrictis, saturate fuligineis, denique in 16 articulos separatis.

Hab. in Polyporo ?cubensi vetusto, Rio Grande do Sul Brasiliæ.

CLINTONIELLA Sacc. — Syll. II p. 532, XIV p. 645, XVI p. 588.

1. **Clintoniella incarnata** (Pat. et Har.) Sacc. et Trott., *Hypocrea in-* 4957
carnata Pat. et Har., Bull. Soc. Mycol. de France XXII (1906)
 p. 120. — Stromate effuso, planiusculo, sparso v. confluenti, crassiusculo, 2-8 mm. lato, carnosulo, suborbiculari, albido, dein incarnato, ex ostiolis peritheciorum, crebre punctato; peritheciis in-natis, ovoideis, circiter 250 μ . diam.; ascis cylindraceis, brevissime stipitatis, 75-90 \times 7-9, octosporis; sporidiis monostichis, ovalibus, medio uniseptatis, non constrictis, minutissime punctulatis, hyaliniis, 10-13 \times 5-6.

Hab. ad corticem ramorum, Samoa (LLOYD).

PODOCREA Sacc. — Syll. II p. 530, XIV p. 645, XVI p. 587,
 XVII p. 799.

1. **Podocrea Solmsii** (Fisch.) Sacc. et Trott., *Hypocrea Solmsii* Fisch. 4958
 — Syll. IX, p. 979 — var. *corniformis* Bresadola, Ann. Mycol. V (1907) p. 241. — Stromate simplici, corniformi, 10 cm. longo, 1 cm. crasso, apice obtuso, cervino, testi, hic illuc lacunoso; ascis 100-110 \times 5-6, jodo —; paraphysisibus septatis, 3 μ . crassis; articulis sporarum cuboideis, demum subasperulis, superiori $6\frac{1}{2}$ - $7\frac{1}{2}$ \times 4-5 $\frac{1}{2}$, inferiori $4\frac{1}{2}$ -5 \times 4 $\frac{1}{2}$ -5.

Hab. ad ligna in ins. Java (HEINRICHER). — A typo differt forma simplici, regulari, valde elongata, exacte corniformi et sporis cuboideo-diffractis, non 1-septatis uti in icona Fischerii delineatur.

2. **Podocrea alutacea** (Pers.) Lind. Pflanzenfam. Pilze I, pag. 364, 4959
Hypocrea alutacea (Pers.) Ces. et De Not. — Syll. II, p. 530. — Teste cl. Atkinson, Bot. Gaz. Dec. 1905 aliisque mycologis, species non est parasitica in *Clavaria* et *Spathularia* sed sic dicta matrix est genuinum ejus stroma clavariforme, hinc vera *Podocrea*.

STILBOCREA Pat. — Syll. XVI p. 588.

1. **Stilbocrea macrostoma** (B. et C.) v. Höhn. Fragm. Mykol. VIII, 4960
 p. 29. — Ita vocanda est *Nectria macrostoma* B. et C. — Syll. II, p. 506 — cuius syn. esset *Stilbocrea Dussii* Pat. — Syll. XVI, p. 588, teste v. Höhn.

HYPOMYCES Fr. — Syll. II p. 466, IX p. 954, XI p. 356, XIV p. 641, XVI p. 582, XVII p. 803.

1. **Hypomyces niveus** P. Henn., in Voeltzkow Reise Ostafrika III 4961 (1908) p. 28, taf. III, f. 19. — Peritheciis sparsis, subglobosis v.

subovoideis in sicco collabentibus, tenui-membranaceis, niveis, obtuse ostiolatis, basi hyphis hyalinis laxe fasciculatis 3-4 μ . cr. circumdatis, 130-150 μ .; ascis cylindraceo-clavatis, obtusis, octosporis, 40-58 \times 3-3,5; sporidiis oblique monostichis, oblongo-ovoideis, uniseptatis haud constrictis, hyalinis intus granulosis, 6,5-8 \times 2,5-3,5.

Hab. ad *Polyporum* sp., Fénérive Madagascar. — *H. candidanti* Plow. affinis sed peritheciis, sporidiis non constrictis, matrice etc. distinctus.

2. ***Hypomyces australiensis* v. Höhn.** Sitzb. k. Ak. d. Wiss. Wien 4962 CXVIII, Abt. I (1909) pag. 294. — Stromate tenui membranaceo glabro, sordide aurantiaco hinc inde violaceo v. carneo-maculato ex hyphis laxis hyalinis 3-4 rarius -8 μ . cr. formato; peritheciis immersis, sparsis, globoso-applanatis aurantiis, ostiolo obtuse conico demum collabescendo discoideo, 80 \times 65 præditis, 250 μ . diam., tenui-membranaceis; paraphysibus nullis; ascis cylindricis 90 \times 5; sporidiis monostichis, octonis, fusoideis, utrinque acutis, granulosis, hyalinis v. dilute luteolis, 12-16 \times 4-5.

Hab. in subiculo fungino albo quodam, corticem levem arboris obducente; Barrow-River Australiæ (PRITZEL). — *Hypomyceti chromatico* peraffinis.

3. ***Hypomyces javanicus* von Höhnel**, Sitzb. k. Ak. d. Wiss. Wien 4963 CXVIII, Abt. I (1909) p. 293, Rehm, Ascom. exs. fasc. 44, n. 1849. — Stromate arachnoideo non membranaceo, inconspicuo plerumque elongato 1 cm. c. longo, lète flavo-aurantiaco, ex hyphis tenuibus 2-3 μ . cr. formato; peritheciis sparsis subinde duobus v. pluribus connatis, aurantiacis infra pallidioribus, ovoideis, contextu tenui cellulosō, apice in ostiolum, 50-80 \times 60, obtuse conicum desinentibus, 260 \times 200; ascis cylindricis 100 \times 6-7 paraphysibus obsoletis; sporidiis octonis monostichis fusoideis utrinque acutis, flavidis, granulosis plerumque rectis, 15-18 \times 5,5-6,5.

Hab. in hymenio *Polystichi elongati* in silvis Tijbodas ins. Javæ. — Cum *Hypom. chromatico* et *boleticola* imperfecte notis forte identicus.

4. ***Hypomyces Leotiarum* Fayod** in Ann. Sc. nat. sér. VII, 2 (1885) 4964 pag. 49, t III, f. 9-12. — Peritheciis hucusque ignotis; mycelii hyphis perangustis, sæpe bifurcatis, crebro septatis; conidiis in apice ramulorum nascentibus fusoideis, rectis, utrinque acutis, 9-12 \times 2,5-3, subhyalinis, intus granulosis; chlamydosporis breviter pedicellatis, initio subpiriformibus dein globosis, bitunicatis, tunica interna crassissima, atro-viridibus, 18-20 μ . diam., levibus;

pedicello (seu articulo inferiore) in sporam sensim dilatato, eaque breviore, tenuiter 1-tunicato, hyalino.

Hab. in toto ascomate *Leotia* lubrica, quæ non deformatur sed colorē omnino peculiarem viridem ex parasita induit, in aliis Vallesiacis et verisimiliter alibi. — *Leotia atro-virens* Pers., observante cl. Fayod, est probabiliter *Leotia lubrica* mycete invasa.

5. **Hypomyces Psiloti** Bernátsky in Termész. Füzet. XXII (1899) 4965

Species quoad genus omnino incerta. p. 107, t. 6-7. — Peritheciis globosis, sursum obtuse conoideis, flavo-brunneis; contextus cellulæ minutis, 6 μ . cr., non prominentibus; ascis clavatis (non linearibus) octosporis; sporidiis in parte ascii latiore sitis, fusiformibus, 8-12 \times 3, tenuiter tunicatis, levibus, contentu hyalino.

Hab. in truncis Psiloti triquetri culti in Rossia. — Teste cl. Bernátsky *Nectria Vandæ* Wahrl. — Syll. IX, p. 968 — et *N. Goroshankiana* Wahrl. sint dicendæ *Hypomyces Vandæ* et *H. Goroshankianus* Bern. l. c.

6. **Hypomyces Trichoderma** (Hoffm.) Sacc. — var. **Schorsteini** Bres. 4966

Fungi gall., Ann. Myc. v. VI (1908) p. 47 — Syll. II, p. 475, XI, pag. 357. — Subiculo corticioideo, luride cinereo, ex hyphis septatis, 4-9 μ . cr. crassis composito; peritheciis subglobosis basi tantum in subiculo nidulantibus, flavidis, nigricantibus, contextu subparenchymatico, 270-300 μ . altis, 240-250 μ . crassis, ostiolo majusculo, a perithecio basi contracta clare distincto, 100-120 μ . alto, 90-105 μ . lato, pulchre violaceo, contextu e cellulæ transverse oblongis conflato; ascis cylindraceo-subclavatis 90-95 \times 5-6; sporidiis hyalinis, fusoideis, 1-septatis, utrinque appendiculatis, 22-24 \times 4.

Hab. ad asseres quercinos in ducto vaporario, Florisdorf pr. Vindobonam Austriæ (Archit. J. SCHORSTEIN). — Species hæc parum est cognita et ab auctoribus de ostiolo violaceo non fit sermo, ideoque ceu varietatem fungum nostrum admisisimus; forte tamen hæc nota prætervisa, quia nisi ope microscopii conspicitur (Bressadola l. c.).

7. **Hypomyces Hyacinthi** Sorauer, Handb. Pflanzenkr. 2 Aufl. II 4967

(1886) p. 100, tab. V. — Peritheciis piriformibus 300-450 μ . alt., 160-220 μ . cr., gregariis confertisque maturis rubro-sanguineis; ascis cylindraceis 60-100 μ . long., tetrasporis vel octosporis, basi angustatis irregulariter inflatis; sporidiis oblique monostichis ellipsoideis uniseptatis, 10-18 \times 4-8, medio constrictis.

Hab. in bulbis Hyacinthi culti in Germania. — *Hyp. Solani* affinis sed diversa sporidiis levibus nec non aliis characteribus

ejusdem formarum inferiorum quæ sunt e genere *Fusisporii* et *Sepedonii*.

LISEA Sacc. — Syll. II p. 517, XI p. 360, XIV p. 640, XVI p. 581, XVII p. 806.

1. **Lisea parasitica** Rick, Broteria V (1906) pag. 41. — Peritheciis 4963 minutis, 50 μ . diam., gregariis, viridulo-hyalinis, denique obscure violaceis, primitus byssو tenui et alba insidentibus; ascis 38-50 \times 6-7,5, octosporis; sporidiis cylindraceis 6-7,5 \times 3, uniseptatis, ad vix constrictis, hyalinis, denique viridulis; paraphysibus septum nullis.

Hab. in *Hypoxylo enteroleuco* Speg. parasitans, quod totum commutat, Rio Grande do Sul Brasilie. — An *Balzania* Speg. huc pertinet?

2. **Lisea verrucosa** Starb., Ascom. Schwed. Chaco-Cordill. Exp. Ar. 4965 kiv f. Bot. Bd. V (1905) p. 9. — Peritheciis solitariis vel saepius in acervulis longitudinalibus, seriatim erumpentibus aggregatis, primo globulosis, deinde cylindraceo-conoideis et mutua pressione difformibus, interdum fere turbinatis atque manifeste rugoso-verruculosis, vix papillulatis, demum poro lato pertusis, atris, contra lucem amœne cœruleo-violaceis, vetustioribus fuligineo-violaceis, textura mollissima, hypocreacea, cellulis 6-20 μ . diam., ad basim hyphis cyaneo-fuligineis parce cinctis, 100-175 μ . diam.; ascis octosporis, cylindraceis vel cylindraceo-clavatis, fere sessilibus, sursum obtuse truncatulis, 75-90 \times 7,5-9; sporidiis monostichis vel superioribus distichis, ellipsoideis vel ellipsoideo-fusoideis, utrinque obtusiusculis, primo 4-guttulatis, demum (quod e germinantibus liquet) medio septatis, interdum constrictis, rarissime 3-septatis, hyalinis; paraphysibus nullis vel mox diffluentibus.

Hab. in caulibus *Equiseti* una cum *Nectria lophiostomacea* Starb. in Prov. Jujuy, Quinta pr. Laguna de la Brea, Argentina.

— Ab aliis speciebus *Liseæ* peritheciis rugoso-verruculosis, a *Gibberellis* sporidiis typice 1-septatis differre videtur.

VALSONECTRIA Spegazz. — Syll. II p. 519, XIV p. 645. — Quoad *Valsonectria parasitica* (Murr.) Rehm, cfr. *Endothia gyroza*, supra.

1. **Valsonectria Boldoæ** Speg., Fungi Chilenses (1910) pag. 98, cum 4970 icon. — Stromatibus cortice innatis erumpentibus parvis aureis subpulverulentis; peritheciis paucis (2-5) circinantibus subglobosis carnosulis, fusco-luteolis, ostiolis brevibus cylindraceis obscurioribus

conniventibus non v. vix exertis coronatis, 150-180 μ . diam.; ascis clavulatis aparaphysatis longiuscule attenuato-pedicellatis, 70 \times 6, octosporis; sporidiis parvis botuliformibus utrinque minute 1-guttulatis, leniter chlorinis, 8-12 \times 2.

Hab. in ramulis emortuis Boldoæ fragrantis prope Talcahuano Chile Amer. austr.

Sect. 5. Phæodidymæ.

LETENDRÆA Sacc. — Syll. II p. 538, XIV p. 646.

1. **Letendræa rhynchostoma** v. Höhnel, Fragm. z. Mykol. Sitzb. k. 4971

Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) pag. 108. — Peritheciis gregariis, superficialibus, levibus, circ. 400 μ . cr., rotundatis, ovoideis, rostello usque ad 200 μ . cr. apice transverse truncato, nunc brevi nunc usque ad 700 μ . longo præditis, brunneo-flavis, tenui-membranaceis, contextu flavo parenchymatico; apice rostelli obscure brunneo; paraphysisbus filiformibus, numerosis ascis longitudine superantibus; ascis tenuissime tunicatis octosporis, cylindraceis, 85-100 \times 8-10; sporidiis monostichis primum cyaneis, dein nigris, elongato-fusoideis et plus minus curvis lunulatis, utrinque obtusis, minute biguttulatis, demum bilocularibus (loculis sæpe inæqualibus), 11-17 \times 6-7.

Hab. in endocarpio putri Juglandis regiae, Prater prope Wien Austriae inf.

2. **Letendræa bahiensis** Spegazz., Micromycetas de los Cacaoyeros, 4972

Rev. Facult. Agronom. y Veter., t. II, La Plata (1906) nn. 4-6, pag. 307, fig. D. — Subiculo (an heterogeneo?) superficiali, arcte matrici adnato submembranaceo compactiusculo tenui, ambitu repandulo sensim attenuato-evanescente, albescenti subcinerescente, ex hyphis gracilibus, 3-4 μ . cr., crebre ramulosis septatisque dense intertextis hyalinis efformato; peritheciis subiculo plus minusve infossis, rarius plane superficialibus, sparsis depresso-globulosis, parvis, 120-180 μ . diam., glabris, astomis (?), primo albidis dein flavidulis postremo lateritiis, membranaceis carnosulis, contextu melleo indistincto; ascis subfusideo-cylindraceis antice obtuse rotundatis postice brevissime crassiusculeque pedicellatis, 70-80 \times 12-14, aparaphysatis; sporidiis rectis v. oblique distichis, elliptico-elongatis, 20 \times 7, rectis vel leniter inæquilateralibus, medio 1-septatis, ad septum constrictis, fuligineis, subopacis.

Hab. in trunco Theobromæ Cacao, Bahia de todos los Santos Brasilia (HEMPPEL).

3. *Letendræa epixylaria* Rick., in Ann. Mycol. III, p. 239 (1905). — 4978
Peritheciis gregariis depresso-orbicularibus, ostiolatis, fusco-atris,
contextu nectriideo, $\frac{2}{3}$ mm. latis, subiculo brunneo, laxo insiden-
tibus, superne glabris, nitidis; ascis pedicellatis, linearibus, ca. 50
 μ . longis (parte sporif.), 3-4 μ . latis, octosporis; sporidiis cylindra-
ceo-rectangularibus bilocularibus, uniserialibus, loculis subinæqua-
libus, septo crasso formatis, 6-8 μ . longis, 3-4 μ . latis, brunneis;
paraphysibus multis, filiformibus, plerumque simplicibus.

Hab. in pedunculo Xylariæ pedunculatae, perithecia Xy-
lariæ imitans, Rio Grande do Sul Brasiliæ.

NEOSKOFITZIA Schultz. — Syll. IX p. 981.

1. *Neoskofitzia Termitum* von Höhnel, Sitzb. k. Ak. d. Wiss. Wien 4974
CXVII (1908) Abt. I p. 998. — *Peritheciis liberis, stromate de-*
stitutis, superficialibus, solitariis v. plus minus gregariis, primum
sublateritiis dein sordide brunneis, globosis, 300-400 μ . diam., mi-
nute ostiolato-papillatis; contextu parenchymatico e cellulis 40 μ .
lat. tenuiter tunicatis constituto; paraphysibus nullis v. indistin-
ctis; ascis numerosis, plerumque cylindraceis, 16-sporis tenuibus,
44 \times 4; sporidiis plerumque monostichis, subovoideis, flavidо-gri-
seo-olivaceis, geminatis, 3-3,5 μ . cr.

Hab. ad nidos Termittum, Buitenzorg et Tjibodas in ins. Java.

2. *Neoskofitzia hypomycoidea* Rick, in Ann. Myc. III (1905) p. 239 4975
— *Peritheciis aggregatis, liberis, in mycelio mucedineo, griseo-ci-*
nereo insidentibus, globoso-ovatis, ostiolo acuto, sordide luteis, $\frac{1}{2}$
mm. latis, primitus hirsutulis, dein minutissime scabrosis; ascis
linearibus, 60-70 μ . longis, 3-4 μ . latis, octosporis; sporidiis bicel-
lularibus, mox in 16 articulos secedentibus; articulis globoso-re-
ctangularibus, 3-5 μ . diam., hyalinis vel subhyalinis.

Hab. in Polyporo vetusto, Rio Grande do Sul, Brasilia.

PHÆONECTRIA Sacc. — Syll. XI p. 359, XVI p. 580, XVII p. 796

(ut subgen.), *Macbridella* Seaver, Mycol. I (1909) p. 195.

1. *Phæonectria olivacea* (Seaver) Sacc. et Trott., *Macbridella clivacea* 4976
Seaver, Mycologia II (1910) pag. 178, tab. XXX, fig. 6-13. —
Stromatibus erumpentibus centro potius compactis, extus conidio-
phoris ramosis, numerosis, floccosis, albis dein rubentibus 1 μ . cr.
conpersis, sparsis v. confluentibus; conidiophoris verticillato-ra-

mosis; conidiis catenulatis, ellipsoideis, 5-6 \times 4-5; peritheciis cæspitosis in stromate insertis v. circum positis, obscure rubentibus, granulis olivaceis conspersis et tunc cæspitulos atro-virentes red-dentibus; ascis cylindricis, octosporis; sporidiis monostichis, imbricatis, fusoideis v. ellipsoideis, hyalinis et muco diaphano obvolutis, 1-septatis, dein olivaceis v. fumoso-brunneis, septoque constrictulis, longitudinaliter obsolete striatis, biguttulatis, 12-15 \times 8.

Hab. ad stipites Palmæ cujusdam, Montzorongo Mexico (W. A. MURRILL).

LOJKANIA Rehm, Contr. mycol. Hung. (Növ. Kozlem. IV (1905) p. 2 (Etym. a cl. lichenologo hungarico H. LOJKA). — Perithecia membranacea, stromate superficiali ex hyphis fuscis ramosissimis, arctissime complexis formato, extus levigato, haud carbonaceo gregarie innata, fusca, papillula minima prominentia. Ascii cylindracei, 8-spori. Sporidia fusiformia, medio septata, primitus hyalina, dein subfusca, 1-sticha. Paraphyses filiformes. — Stromate haud carbonaceo nec crustaceo superficiali a generibus stromaticis cum sporis phæodidymis plane diversum genus, imprimis a *Camarope* Karst., cuius stroma e substantia substrati formatum extus *Hypoxylo* similis stromate, sporis et peritheciis alienum; proximum *Neopeckiae* Sacc., quæ autem peritheciis carbonaceis superficialibus, subiculo copioso interdum semiimmersis gaudet, stromate vero caret. — Quoad peritheciis structuram membranaceam, molle ad *Hypocreales* propius vergit ibique forsitan sub *Hypomycteis* aptissime locandum est (Rehm l. c.).

1. **Lojkania hungarica** Rehm, l. c. p. 2. — Peritheciis in plagiis superficialibus, 1-2 cm. lat., stroma late diffusum, subæquale, 1 mm cr., extus albidulum itemque marginatum, levigatum, intus fusco-nigrum, molle formantibus, gregarie innatis, globosis, minute papillulatis, demum poro conspicuo pertusis, 0,4 mm. diam., contextu parenchymatico fusco, crustam obtegentem atro-inquinatam sub-elevantibus, haud carbonaceis, subiculo denso hypharum ramosissimarum, longissimarum, fuscidularum, septatarum, 3-5 μ . cr. obductis et conjunctis; ascis cylindraceis, apice rotundatis, crasse tunicatis, c. 200 \times 12-15, octosporis; sporidiis fusiformibus, utrinque subacutatis, medio septatis, vix constrictis, primitus hyalinis, demum fuscis, utraque cellula guttis 2 magnis oleosis prædicta, rectis, 25-30 \times 9-10, 1-stichis; paraphysisibus filiformibus, 2 μ . crassis, septatis.

Hab. ad lignum in balneo sape inundatum, P.-Szentgyörgy, Hungariæ (Dr. ZAHLBRÜCKNER). — A *Neopeckia Coulteri* et *N. diffusa* rite distincta.

Sect. 5. Hyalophragmiae.

CESATIELLA Sacc. — Syll. II p. 557, XVII p. 808.

1. **Cesatiella polyphragmospora** Da Camara, Mycetæ aliquot Theobro- 4978
mæ Cacao in Sancti-Thomensi Insula, Lisboa (1910) p. 3, t. III,
fig. 6-9. — Peritheciis immersis, sparsis, globosis, melleis ostiolo
minuto pertusoque, 300-450 μ . diam.; ascis octosporis, cylindra-
ceis, cylindraceo-clavulatis v. inflatis, brevi-stipitatis, apice rotun-
datis, 130-150 \times 15-18; paraphysibus numerosis, filiformibus, longis
pluriguttulatisque; sporidiis distichis, oblongo-ellipsoideis, nubilosus,
hyalinis, plerumque septem v. raro octoseptatis, plus minus fal-
catis, utrinque rotundatis, non constrictis, 50-60 \times 10-12.

Hab. in cortice Theobromæ Cacao in ins. S. Thomé (J. J.
DE ALMEIDA et CANNAS MENDES).

CALONECTRIA De Not. — Syll. II p. 540, IX p. 982, XI p. 363,
XIV p. 647, XVI p. 593, 1141, XVII p. 809.

1. **Calonectria tetraspora** (Seaver) Sacc. et Trott., *Scoleconecktria te-* 4979
traspora Seaver in North Am. Fl. III, pt. 1 (1910) pag. 27. —
Peritheciis in cæspitulos 0,5-2 mm. diam. dense confertis, hypo-
stromate indistincto insertis, superficialibus, globosis v. subglobosis,
ostiolo subinde collabescente præditis, extus conspicue albido-fur-
furaceis et tunc habitum verrucosam fingentibus, pallide auran-
tiacis, 250-300 μ . diam.; ascis late clavatis, 70-80 \times 10-12, tetraspo-
ris; sporidiis monostichis v. in centro ascis subconfertis, apicibus
superimpositis, ellipsoideis utrinque tenuatis, rectis curvulivis, hya-
linis, intus granulosis, distincte 3-septatis, 25-28 \times 8-10.

Hab. in truncis Theobromæ Cacao, Port Maria Jamaicæ
(EARLE).

2. **Calonectria Rehmiana** Kirschst., Verh. Bot. Ver. Brandenburg 4980
XLVIII (1906) p. 59. — Peritheciis e stromate flavidio, rotundato
v. elongato, immerso orientibus, primum globosis, dein discoideo-
collabescentibus, membranaceis, primum pallide brunneis demum
nigris; excipulo grosse parenchymatico; ascis clavatis, breviter pe-
dicellatis, tenuissimis, octosporis, 80-90 \times 12-14; sporidiis supra

distichis infra monostichis, hyalinis, plerumque fusoideis utrinque rotundatis, sed etiam subcylindraceis v. subclavatis, quadrilocularibus, ad septa quandoque constrictulis, rectis v. leniter curvulis, 20-30 \times 6-8.

Hab. in ramulis Corni sanguineæ prope Gross-Behritez Germania.

3. **Calonectria bahiensis** Hempel, Bol. Agric. Sao Paulo, V ser. (1904) 4981 n. 1 p. 22.

Hab. in cortice Theobromæ Cacao, Bahia in Brasilia. — Exemplaria obsoleta, imperfecta observata. Crustas irregulares, latas, atras in cortice format.

4. **Calonectria rubro-punctata** Rehm, Ann. Mycol. VII (1909) p. 539. 4982 — Peritheciis in hypophyllo singulis, maculis orbicularibus rubellis c. 0,5 mm. diam., innatis, globoso-conoideis, ferrugineis, glabris, parenchymatice tenuiter rubro-fusco contextis, papillula prominente, 0,2 mm. diam.; ascis oblongo-cylindraceis, apice rotundatis, 60-65 \times 9, 8-sporis; sporidiis fusiformibus, utrinque acutatis, 4-cellularibus, hyalinis, 12-15 \times 3, distichis; paraphysibus teneris, subramosis.

Hab. in hypophyllo folii Eugeniae bagensis, Sao Leopoldo Rio Grande do Sul Brasiliæ (THEISSEN S. J.) — *Calonectriæ transseunti* similis.

5. **Calonectria pachythrix** Rehm, Ann. Mycol. V (1907) p. 531. — 4983 Peritheciis in mycelio longe lateque effuso, pallide flavo-albello, tenuissime membranaceo-parenchymatico gregarie sessilibus, globulosis, apice plerumque umbilicatis, 300-350 μ . diam., flavidо-albellos vel flavidо-succineis, contextu parenchymatico e cellulis polydricis magnis conflato, pilis sparsis rectis, obtusis, ad basim dilatatis, 2-3 cellularibus, hyalinis, crasse tunicatis, 60-100 \times ad basim 10-12 μ . cr., obsessis; ascis oblongis, apice rotundatis, sessilibus, c. 90 \times 12, octosporis; sporidiis fusoideo-oblongis, utrinque subacutatis, rectis, primitus granulis minutissimis repletis, demum 4-cellularibus, hyalinis 40 \times 4-5, di-tristichis; paraphysibus filiformibus, 2-3 μ . cr., hyalinis.

Hab. ad ramulos Rubi, Sao Francisco dos Campos, Sao Paulo Brasiliæ (F. NOACK). — *Calonectriæ melioloidi*, *C. Lagerheimiana* et *C. ambiguae* subaffinis.

6. **Calonectria Pithecoctenii** d'Alm. et da Cam. in Rev. agron. Portug. III (1905) pag. 254, t. V, f. 1-3. — Peritheciis plerumque cæspitosis, raro sparsis, ovoideis, sursum attenuatis, atro-purpureis

400-450 \vee 200-250; ascis subclaviformibus, octosporis, 65-75 \vee 11-13; sporidiis amygdaliformibus, sursum rotundatis, deorsum attenuatis, triseptatis, hyalinis, oblique monostichis vel irregulariter subdistichis, 17-20 \vee 8-10.

Hab. in ramulis emortuis *Pithecoctenii Squali*, in horto botanico Coimbra Lusitania (A. MOLLER).

7. *Calonectria stromaticola* P. Henn., Engl. Bot. Jahrb. XL (1907) 4985 p. 226. — Maculis epiphyllis stromatiformibus, atris, rotundatis v. effuso-angulatis; peritheciis marginalibus dense cæspitosis confluentibusque, ovoideis v. subglobosis, pallidis, papillatis, in sicco collabentibus, c. 200-300 μ . cr., extus pilosis, pilis variiformibus, hyalinis, obtusis, saepe brevibus 30-50 \vee 8 v. flexuosis usque ad 250 \vee 3-4; ascis clavatis, apice obtuso-rotundatis, 8-sporis, 90-15 \vee 10-16; paraphysibus copiosis, filiformibus, hyalinis, c. 2 μ . cr.; sporidiis subtristichis, longe fusoideis, rectis v. curvatis, utrinque obtusiusculis v. acutiusculis, primo 1- dein 5-7-septatis, constrictis, hyalinis, 50-70 \vee 4-5.

Hab. in foliis Lauraceæ sp., Monzon 2000-2500 m. alt. in Peruvia (WEBERBAUER).

8. *Calonectria Rickiana* Sacc. et Syd., in Saccardo, Not. Mycol. IX, 4986 Ann. Myc. v. V (1907) p. 177. — Peritheciis in ascomycete epiphylo parasiticis, globulosis, 0,5 mm. diam., ceraceo-fragilibus, albidis, superficialibus, subinde squamulosis; ostiolo punctiforme impresso; ascis tereti-fusoideis, brevissime stipitatis apice obtusiuscula tenuatis, ibique incrassatis lumineque angustato præditis, 140-170 \vee 15, octosporis; paraphysibus filiformibus ascum subæquantibus; sporidiis distichis, fusoideis v. fusoideo-clavulatis, leniter curvis, 55 \vee 5,5-6, rarius usque ad 75-80 \vee 5,5-6, obsolete 4-5-septatis, non constrictis, hyalinis, intus minute granulosis.

Hab. in foliis Nectandræ, parasitice in peritheciis Ascomycetis immaturi cuiusdam, Sao Leopoldo Brasilie (J. RICK).

9. *Calonectria olivacea* von Höhnel, Fragn. z. Mykol., Sitzb. d. k. 4987 Ak. d. Wiss. Wien, Bd. CXVI, Abt. I (1907) p. 107. — Peritheciis semiimmersis, gregariis, liberis v. 2-3 adnatis, globosis vel ovoideo-piriformibus, 280 μ . diam., tenui-membranaceis, late ostiolo-papillatis, papilla conoidea 30-50 μ . lata; contextu parenchymatico, pallide olivaceo, circa ostiolum nigro-olivaceo et leniter cyaneo-tincto; paraphysibus numerosis, filiformibus; ascis clavatis, tenuiter tunicatis, basi breviter angustato-stipitatis, octosporis 80-100 \vee 8-9; sporidiis distichis, hyalinis, elongato-ellipsoideis, utrin-

que angustatis et rotundatis, grosse quadriguttulatis, demum quadrilocularibus, ad septa non constrictis, tenuiter tunicatis, 12-16 \times 3-4. J. -

Hab. in ligno putri Fagi prope Rekawinkel Austriae inf. — Species a typo generis recedens.

10. *Calonectria dolichospora* Sacc. et Trott., *Calonectria macrospora* 4988
Rick, Broteria V (1906) p. 41, non Sacc. — Peritheciis majusculis, 1 mm. latis, luteo-brunneis, carneo-membranaceis, subiculo perisporiaceo insidentibus, subhirsutis, papilla minuta; ascis 180 \times 20, clavato-cylindraceis, curvulis, fere sessilibus; sporidiis 100-110 \times 7, multiseptatis, multiguttulatis, uno apice angustioribus, hyalinis.

Hab. in foliis putridis Palmæ sp., Rio Grande do Sul Brasiliæ.

11. *Calonectria Copelandi* P. Henn., Hedwigia XLVII (1908) p. 253. 4989
— Peritheciis hypophyllis, sparsis v. subgregariis, sphæroideis papillatis dein collapsis, aurantiacis, 200-250 μ ; ascis fusoideis vel clavatis sæpe curvulis, apice acutiusculis, 8-sporis, 40-60 \times 10-14; sporidiis oblique monostichis v. subdistichis, cylindraceo-fusoideis, hyalinis, 7-septatis, 20-26 \times 4-4,5.

Hab. in foliis Orchidaceæ, Mindanao, Santa Cruz ins. Philippin. (COPELAND).

12. *Calonectria gigaspora* Massee, Kew Bull. n. 7 (1906) p. 257. — 4990
Peritheciis aggregatis, obovatis, levibus, glabris, coccineis, 1 mm. altis; ascis longissimis, octosporis, aparaphysatis; sporidiis oblique monostichis v. supra distichis, hyalinis, subfusoideis, demum septatis, 90-100 \times 20.

Hab. in culmis Sacchari officinarum, Trinidad Indiæ occ. (HAET). — Facile dignoscenda forma peritheciorum et latitudine sporidiorum.

13. *Calonectria Equiseti* Starb., Ascom. Schw. Chaco-Cordill. Exped., Archiv f. Bot. Bd. V (1905) p. 10. — Peritheciis plerumque ad nodos 3-30 aggregatis, cæspitose vel inter nodos in series longitudinaliter erumpentibus, rarissime nonnullis solitariis, primo globulosis, deinde turbinatis et mutua pressione difformibus, demum collabescentibus, manifeste, sed non papillatim ostiolatis, primo pallide ochraceis, deinde leniter fuscescentibus, albido-puberulis, 200-300 μ . diam.; ascis octosporis, clavatis, sessilibus, sursum lumine sæpe acutato, 44-50 \times 6-7,5; sporidiis in superiore parte distichis vel congregatis, in inferiore monostichis, oblongatis, utrinque obtusiusculis, guttulas 2 apicales, 2 medias foventibus, hyalinis, 9-10 \times 2,5-3,5; paraphysibus nullis.

Hab. in caulis aridis Equiseti, Quinta pr. Laguna de la Brea prov. Jujuy, Argentina. — Species nulli descriptæ affinis sporidiis minoribus nec non matrice distincta videtur.

14. **Calonectria decora** (Wallr.) Sacc. — Syll. II, pag. 543. — var. 4992 parasitica Hazsl. Sphaer. Hung. p. 7, t. I, f. 2. — Ascis clavatis, brevissime noduloso-stipitatis, filiformi-paraphysatis; sporidiis inæ qualiter distichis fusoideis, triseptatis, ad septa non constrictis, utrinque acutatis, subinde sursum incrassatis, hyalinis, 30-36 \times 8-9.

Hab. parasitica in peritheciis Massariæ Populæ ad ramos Aceris Pseudoplatani pr. Eperies Hungariæ.

15. **Calonectria Fuckelii** (Sacc.) Rehm — Syll. II, p. 545. — var. 4993 Everniæ Rehm, in Tranzsch. et Serebrianikow, Mycotheca rossica fasc. II, n. 68 (1910). — Sporidiis primum 2-, dein 4-locularibus.

Hab. in Everniæ spec. in Rossia.

16. **Calonectria circumposita** Kirschst., Verh. Bot. Ver. Brandenb. 4994 XLVIII (1906) p. 59. — Peritheciis circulariter dispositis, plerumque conjunctim erumpentibus, flavidis, piriformibus, 200-300 μ . diam.; ascis fusoideis, breviter pedicellatis, supra obtusatis, octosporis, 60-70 \times 10-12; sporidiis supra oblique monostichis v. irregulariter distichis, infra recte monostichis, hyalinis, oblongis vel fere fusoideis sed utrinque rotundatis, medio septatis et constrictis, 4-guttulatis, demum quadrilocularibus, 14-16 \times 4-5; paraphysibus indistinctis.

Hab. in charta putri prope Rathenow Germaniæ.

PARANECTRIA Sacc. — Syll. II p. 552, IX p. 987, XVII p. 812.

1. **Paranectria Wildemaniana** P. Henn., Mission E. Laurent fasc. III 4995 (1906) p. 316. — Peritheciis in mycelio Meliolæ v. Dimerosporii parasitantibus, sparsis v. gregariis, subglobosis v. ovoideis, hyalino-subflavescentibus, membranaceo-subcellulosis, tenuibus, subtranslucentibus, 100-140 μ . diam., squamulis alicorniformibus, apice repetito-furcatis, hyalinis, 20-30 μ . longis vestitis, basi hyphis filiformibus, hyalinis, septatis, 1,5-2 μ . cr.; ascis clavatis apice crasse tunicatis, rotundatis, 8-sporis, 37-48 \times 8-11; paraphysibus filiformibus, copiosis, hyalinis, 1,5-2 μ . crassis; sporidiis subdistichis, fusoideis, utrinque acutis, subrostellatis, 3-septatis, sæpe curvatis, guttulatis, hyalinis 15-20 \times 5-7.

Hab. in foliis Coffea ad mycelium Meliolæ v. Dimerosporii, Ubangi, Congo, Africa.

2. **Paranectria imperconspicua** v. Höhn. Fragm. Mykol. VII, Sitzb. 4996

k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) p. 822 (an potius «imperspicua»?). — Peritheciis gregariis v. subcaespitosis, globosis, flavidis, 50-100 µ. latis, superficialibus, liberis, tenui-membranaceis, ostiolo indistincto præditis, contextu perithecii 6-10 µ. cr., parenchymatico, extus pilis v. setulis hyalinis laxis tectis; ascis breviter clavatis, sessilibus vel breviter incurvo-stipitatis, supra rotundatis et æqualiter incrassatis, 36-44 ≈ 16-21, 2-4 sporis v. octosporis; paraphysibus tenuiter filiformibus supra ramosis, parcis; sporidiis distichis v. tristichis, hyalinis, fusoideis, utrinque acutis, appendicibus obtusis 3-4 ≈ 1 præditis, quadrilocularibus, 16-24 ≈ 6-7, ad septa non constrictis, loculis mediis longioribus.

Hab. in stromatibus *Discodothis Filicum* ad truncos *Filicum* in Horto bot. Buitenzorg in ins. Java.

BROOMELLA Sacc. — Syll. VII p. 557, IX p. 988, XI p. 364.

1. **Broomella annulata** Rehm ap. Theiss., Ann. mycol. (1910) p. 461. 4997
— Ita nuncupanda est *Nectria annulata* Rehm — Syll. XVI, pag. 572 — quæ, teste Theiss. l. c., non differt a *Broomella Rickeniana* Rehm in Broteria V (1906) p. 226.

GIBBERELLA Sacc. — Syll. II p. 552, IX p. 988, XI p. 363, XIV p. 649, XVI p. 599, XVII p. 813.

1. **Gibberella Saubinetii** (Montgn.) Sacc. — Syll. II, p. 554. — var. 4998
Mate Speg., Ann. Mus. Nac. Buenos Aires t. XVII (1908) p. 129.
— A typo recedit peritheciis rigidioribus sporidiisque suberassioribus 20-22 ≈ 5-6.

Hab. ad ramos dejectos putrescentes *Ilicis paraguariensis* in silvis prope Campo das Cuias, Argentina Amer. austr.

2. **Gibberella rhododendricola** Rehm, Ann. Mycol. V (1907) p. 543. 4999
— Peritheciis in stromate orbiculari nigro, per peridermium erumpente, 0,5 mm. diam., 6-8 gregarie sessilibus, globulosis, minimis, atris, poro haud conspicuo pertusis, glabris, parenchymatice nigro-fusco-contextis, 0,12 mm. diam.; ascis cylindraceis, 90 ≈ 7-9, octosporis; sporidiis oblongis, utrinque rotundatis, 3-septatis, ad septa paullulum constrictis, hyalinis, dein dilutissime flavescentibus, 12-14 ≈ 5-6, monostichis; paraphysibus ramosis.

Hab. ad ramulum Rhododendri hirsuti juxta viam ab Schlehdorf ad montem Herzogenstand alpium Bavariae (Dr. REHM).

— Imprimis minutie stromatis et peritheciorum sporidiisque monostichis species distinguenda.

3. Gibberella parasitica Rick, Broteria V (1906) p. 41. — Peritheciis 5000
100 μ . diam., splendentibus, atris, superficialibus, coriaceo-corneis,
gregariis, sed inter se separatis; ascis 45 \times 13; sporidiis hyalino-
viridulis, octonis, uniserialibus, triseptatis, fusoideis, 20 \times 7, guttu-
latis, paraphysibus nullis.

Hab. parasitica in *Stereos* quodam, Rio Grande do Sul Bra-
siliæ. — Vergit ad genus *Melanomma*, differt autem a *Melanom-*
mate Porothelio B. et C. sporidiis multiserialibus et colore.

LOCULISTROMA Patterson, Charles et Veihmeyer in U. St. Dep. A-
gric. Bur. of Plant Ind. Bull. 171 (1910) pag. 11 (Etym. *stroma*
et *loculi*). — Stroma erectum, cylindraceum, carnosum, molle, vi-
ride v. album, loculis etiam pycnidicis præditum. Loculi ascophori
sparsi, subimmersi, ostiolati. Ascii clavati, cylindracei, octospori,
aparaphysati; sporidia fusoidea, 3-pluriseptata, olivacea.

1. Loculistroma Bambusæ Patt., Charl. et Veihmeyer l. c., tab. I. — 5001
Stromate erecto, molli, carnosu, plerumque sessili, 1 cm. circ. long.,
2 mm. cr., extus obscure viridi v. nigro; peritheciis (loculis) stro-
mate subimmersis, subsphæroideis, 125 \times 100; ascis octosporis, cla-
vatis, cylindraceis, 45-50 \times 9-10; sporidiis olivaceis, fusoideis, 3-
septatis, distichis, 22 \times 4,5-5; conidiis (sporulis) primariis in loculis
amplis orientibus, hyalinis, filiformibus, 14-16 \times $\frac{3}{4}$ -1; sporophoris
8 \times 0,5; conidiis secundariis obscure olivaceis, 1-3-locularibus, hy-
phis olivaceis limitatis.

Hab. in inflorescentia *Bambusæ* (*Phyllostachydis*) sp. in qua
cladomanias generat in America boreali.

Sect. 6. Hyalodictyæ.

PLEONECTRIA Sacc. — Syll. II p. 559, IX p. 990, XVII p. 814.

1. Pleonectria pinicola Kirschst., Verh. Bot. Ver. Brandenb. XLVIII 5002
(1906) p. 59. — Peritheciis cæspitose erumpentibus, in stromate
rubido insidentibus, globosis, breviter papillatis, rubro-lateritiis,
squamulis viridi-flavis tectis; dein apice depresso, 300-400 μ . d.;
ascis cylindraceo-clavatis, breviter pedicellatis, supra rotundatis,
100-120 \times 8-12, microsporis numerosis farctis, 3 \times 1; sporidiis 4,
oblique monostichis, hyalinis, varie conformatis, fusoideis, clavatis
v. cylindraceis, 7-9-transverse et loculo medio 1-longitudinaliter

septatis, 20-30 \times 4-6; paraphysibus filiformibus, multiseptatis, 3 μ . crassis.

Hab. in ramis putrescentibus *Pini silvestris* prope Rathenow Germaniae.

CILIOMYCES v. Höhn., Sitzb. k. Ak. d. Wiss. Wien, CXV, Abt. I (1906) pag. 25 (Etym. *cilium* et *myces* ob sporidia ciliata). — A genere *Pleonectria* imprimis dignoscitur sporidiis pariter fusoideo-vel ellipsoideo-oblongis, muriformibus, hyalinis, sed utrinque 1-ciliatis.

1. **Ciliomyces oropensis** (Ces.) v. Höhn. l. c. p 25, *Nectria oropensis* 5003 Ces. — Syll. pag. 511 et IX, pag. 967 — *Pleonectria lichenicola* (Crouan) Sacc. — Syll. II, p. 560. — Perithecia pilosula, carneæ; asci 120 \times 20, octospori; paraphyses diffuentes; sporidia 26-36 \times 9-11, disticha, fusoidea, 6-septato-muriformia, non constricta, hyalina utrinque cilio 7-8 μ . longo, subulato aucta.

CALYPTRONECTRIA Spegazz., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 412 (Etym. *calyptra* velum, h. e. *Nectria* obtecta). — Perithecia minuta, sparsa, molliuscula, rubescens, epidermide testacea; asci paraphysati, octospori; sporidia muriformia, hyalina. — Est *Hyponectria* dictyospora.

1. **Calyptronectria platensis** Speg., l. c. p. 412 cum icon. — Peritheciis ex hemisphærico sublenticularibus 120-150 μ . diam., subcarnosulis, contextu obscure aurantio donatis, subiculo luteo dense ramuloso 3-4 μ . cr. septulato vestitis; ascis breviter subclavatis 60 \times 16, paraphysibus filiformibus parcis obvallatis; sporidiis distichis, subellipsoideis utrinque obtusiusculis, 20 \times 8, transverse 5-septatis, loculis 1-3 longitudinaliter divisis, ad septum medium præcipue constrictis, hyalinis.

Hab. ad ramos dejectos putrescentes *Manihot carthagenensis* in sepibus prope La Plata, Argentina Amer. austr.

2. **Calyptronectria argentinensis** Speg., l. c. p. 412. — Peritheciis subglobosis 250-300 μ . diam., basi ligno insculptis, carnosulis, glabris, ostiolo crasso brevi nigrescente coronatis; ascis linearibus breviter pedicellatis 110-150 \times 15, paraphysibus filiformibus obvallatis; sporidiis monostichis non v. leniter subfusoideis utrinque saepius obtusiusculis, 20-24 \times 7-9, ad septa constrictulis, 5-septatis, loculo medio supero saepius septo longitudinali diviso.

Hab. ad caules aridos putrescentesque Fœniculi piperiti
Santa Catalina prope Buenos Aires Argentina Amer. austr.

MEGALONECTRIA Speg. — Syll. II p. 560, IX p. 992, XVI p. 599,
XVII p. 815.

1. **Megalonectria** Yerbae Speg., Ann. Mus. Nac. Buenos Aires t. XVII 5006 (1908) p. 129. — Peritheciis cæspitosis, subglobosis, sessilibus 200-250 μ . diam. rubris, carnosulis glabris, in sicco sæpius collabescen-tibus, sæpius Stilba 1- v. 5 cingentibus; Stilbis erectiusculis e pe-dicello, 1-5 mm. long., 0,1-0,2 mm. cr., et capitulo subgloboso ro-seo-aurantio 0,5-0,7,5 mm. diam. constitutis; conidiis obovatis 6-8 \times 2,5-4, hyalinis, ? catenulatis; ascis cylindraceo-subclavatis sur-sum obtusissime rotundatis crassiusculaque tunicatis 100-120 \times 20-25, tetrasporis v. octosporis, paraphysatis v. pseudoparaphysatis; sporidiis ellipsoideis v. elongato-clavulatis 3-5- v. 7-9-septulatis, 25-40 \times 10-14, v. 30-45 \times 10-12, ad septum medium valide constrictis, loculo uno alterove septo longitudinali diviso, hyalinis.

Hab. vulgata ad ramos emortuos putrescentes Ilicis para-guariensis, Rep. Argentina Amer. austr. — Species facile in duas (altera ascis tetrasporis subparaphysatis sporidiisque bre-vioribus 3-5-septatis, altera ascis octosporis paraphysatis sporidiis longioribus) dividenda. — *Meg. cæspitosæ* Speg. affinis.

2. **Megalonectria madagascariensis** P. Henn., in Voeltzkow Reise 5007 Ostafrika III (1908) p. 29, taf. III, fig. 21. — Peritheciis solita-riis v. gregarie erumpentibus, subglobosis, sicco collapso-cupulatis, atro-castaneis, 200-260 μ . diam.. contextu cellulosis rufo-brunneis; ascis clavatis, obtusis, 60-90 \times 15-20, octosporis; paraphysibus fili-formibus hyalinis, 2-2,5 μ . cr.; sporidiis oblique monostichis vel subdistichis, oblonge ellipsoideis, ovoideis v. subfusoideis, 15-21 \times 8-10, flavidо-fuscidulis, 5-7-septatis, muriformibus; conidiophoris solitariis v. fasciculatis, stilbiformibus, rigidis, stipite pallido-nigri-canti c. 15 mm. longo, 150 μ . cr., capitulo hemisphærico v. sub-globoso, atro-brunneo, conidiis ellipsoideis vel ovoideis, 5-6 \times 3, hyalinis.

Hab. ad corticem arborum, Fénérive Madagascar.

TREUBIOMYCES v. Höhn., Fragm. Mykol. VIII (1909) in Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 1180 (Etym. a cl. doct. MELCH. TREUB. recens demortuo, jam meritissimo directore Instituti botanici javanici). — Omnino superficialis; subicum tenui-mem-

branaceum, ex hyphis hyalinis constitutum, dense verrucis parenchymaticis apice setula singula auctis tectum; perithecia mollicarnosa, pallida, hemisphærica, ostiolo rotundato depresso setulis nigris circumdato prædita; ascii aparaphysati clavati, quadrioclospori; sporidia hyalina, muriformi-septata.

1. **Trebiomyces pulcherrimus** v. Höhn. l. c. p. 1181, fig. 1. — Subiculo rotundato 4-5 mm. lato, pelliculas hyalinas tenues reticulatim erumpentes, 5-6 μ . circ. cr. formante; hyphis pluriguttulatis crebro septatis 3-6 μ . cr., stratum unicum formantibus; peritheciis sparsis hemisphæricis basi applanatis, subcarnosis, flavidо-incarnatis, 300 μ . latis, ostiolo impresso 12 μ . lato præditis, setulis (æque ac illis in subiculo sparsis) acicularibus rigidulis acutis 120-200 \times 8-9 μ . e bulbillo parenchymatico orientibus; perithecii contextu pluri-strato ex cellulis 8-10 μ . diam. formato; ascis aparaphysatis, rosulatis, crasse clavatis, apice rotundatis, basi obtuse cuneatis, octosporis, 60-70 \times 25-28, tunica 5 μ . cr.; sporidiis pluriseriatis cylindraceo-oblongis v. subclavulatis utrinque rotundatis, hyalinis, plerumque 7-septatis, septisque longitudinalibus partitis, guttulatis, 34-38 \times 8-9.

Hab. in pagina superiore foliorum Fici elasticæ, socio mycelio *Limacinulae samoensis* in Horto alpino prope Tjibodas in ins. Java.

Sect. 7. Phæodictyæ.

PELORONECTRIA A. Moell. — Syll. XVI p. 599.

1. **Peloronectria umbilicata** Syd., Ann. Mycol. V (1907) p. 358. — 5009
Stromatibus tuberiformibus, globoso-lenticularibus vel depresso-globosis, medio, præcipue in juventute, umbilicatis, lignosis, primo albido-flavis, tandem atro-brunneis vel atris, $1\frac{1}{2}$ -1 cm. diam. matricem non ambientibus, tota superficie peritheciis globosis 150-200 μ . diam., dense obsessis; ascis 25-40 \times 10-12, octosporis; sporidiis bi-tristichis, oblongis, 3-septatis, non v. vix constrictis, raro cellula una media septo longitudinali vel obliqua percursa, utrinque obtusis, fuscis, 10-16 \times 4 $\frac{1}{2}$ -6.

Hab. in ramis Eugeniae sp. Sao Francisco dos Campos Prov. Sao Paulo, Brasilia.

ULEOMYCES P. Henn. — Syll. XI p. 364.

1. **Uleomyces decipiens** Syd., Ann. Mycol. VII (1909) pag. 174. — 5010
Stromatibus hypophyllis, maculis indeterminatis pallidis insidentibus, sparsis, rotundatis, 0,5-2 mm. diam., hemisphaerico-applanatis, atro-sanguineis; peritheciis numerosis, immersis; ascis subglobosis v. late ovatis, apice incrassatis, sessilibus, 32-44 \times 25-35, octosporis, paraphysatis; sporidiis conglobatis, oblongis, utrinque rotundatis, primo 3-septatis, hyalinis v. brunneolis, dein 3- raro 5-septatis, brunneis, medio constrictis, semel longitudinaliter septatis, 20-28 \times 10-14.

Hab. in foliis vivis Quercus thalassicae, Hiji Kure-mura Tosa, Japonia (YOSHINAGA).

Sect. 8. Scolecosporæ.

OPHIONECTRIA Sacc. — Syll. II p. 563, IX p. 994, XI p. 365, XIV p. 651, XVI p. 601, XVII p. 815.

1. **Ophionectria ?anomala** Racib., Bull. Acad. Sc. Cracovie (1906) 5011 p. 910. — Peritheciis candidis breviter cylindraceis, 220 μ . alt., 190 μ . lat., vertice obtusis, pulvinulo albo minuto insidentibus, crasse tunicatis, superficie granulosis, cavitate phialiformi 170 \times 100, ostiolis non emergentibus; ascis cylindraceis paraphysibus hyalinis, septatis, obvallatis, 160 \times 8-10, octosporis, apice rotundatis; sporidiis filiformibus ascii longitudine parallelis vel tortis, septatis, in articulos 3 \times 1,5 secedentibus.

Hab. in pagina inferiore foliorum viventium Hydnophytum sp. prope Buitenzorg Ins. Javae. — Species ob stromatis et paraphysum præsentiam in genere anceps.

2. **Ophionectria cupularum** Kirschst., Verh. Bot. Ver. Brandenb. 5012 XLVIII (1906) p. 60. — Peritheciis solitariis v. acervatis, pallide brunneis breviter obscurius papillatis, circa papillam denique umbilicatis, globosis, minutissimis, membranaceis; contextu minute celluloso, brunneo; ascis cylindraceis apice rotundatis incrassatis-que, breviter pedicellatis, 8-sporis, 100-110 \times 8-10; sporidiis distichis, hyalinis, intus guttulato-granulosis, parallelis, denique pluricellularibus, utrinque acutis, rectis, curvulisve, 50-60 \times 4; paraphysibus nullis.

Hab. in cupula sub foliis putrescente Quercus pedunculatae in silvis Borussiae.

3. *Ophionectria ambigua* v. Höhn., Ann. Myc. III (1905) pag. 550, 5018 cum icon. — Peritheciis globosis, ostiolo papilliformi præditis, 500 μ . diam., solitariis v. gregariis, superficialibus, levibus, opacis, rugulosis, obscure rubro-brunneis, aqua immersis substantiam rubro-violaceam emitentibus, coriaceo-membranaceis, non carbonaceis; paraphysibus filiformibus, immersis, mox diffluentibus; ascis numerosis, clavatis, tunica tenui præditis, supra angustatis, obtusis, uniformiter pedicellatis, 250 \times 10, octosporis; sporidiis tristichis, subhyalinis v. pallidissime brunneolis, cylindraceis, apice rotundatis v. subacutatis, 5-8-septatis, quoque loculo 1-2-guttulato, rectis v. leniter curvulis, 65 \times 5.

Hab. in ligno pineo putri, Altenmarkt in Austria inf.

4. *Ophionectria cylindrothecia* Seaver, Mycologia I (1909) pag. 70, 5014 tab. IV fig. 4. — Peritheciis gregariis v. sparsis clavato-cylindraceis v. fusoideis, basi stipitiformi præditis, flavidis, diaphanis, subglabris, siccis duriusculis, sepe basi hyphis septatis parce cinctis, 275-300 \times 125-150; ascis cylindraceis v. clavatis, octosporis, 100-125 \times 12-15; sporidiis elongatis utrinque tenuatis e hyalino dilutissime flavidis, 7-12-septatis, 60-75 \times 5, paraphysibus obsoletis.

Hab. in culmis putrescentibus Zeæ Maydis, Ohio Amer. bor.

— Sporidia intra ascum veluti membrana propria inclusavidentur.

5. *Ophionectria* ? *flavida* (Rick) Sacc. et Trott, *Cyanocephalium flavidum* Rick, Broteria V (1906) p. 224. — Peritheciis solitariis v. parce aggregatis, ovoideis, flavidis, 0,5 mm. diam., carnosomembranaceis; ascis lageniformibus, 150 μ . longis, ventre 40 μ . cr., fere sessilibus; sporidiis primitus vermiculatis, plurimis, in fragmenta numerosissima secedentibus, hyalinis, articulis 3 \times 2 v. diversæ longitudinis; paraphysibus nullis,

Hab. in ligno putrido in Brasilia. — A typo generis ascis lageniformibus recedit, sed a *Cyanocephalio* sporidiorum fabrica omnino differt.

TRICHONECTRIA Kirschst., Verh. Bot. Ver. Brand. XLVIII (1906) p. 60 (Etym. *thrīx* capillus et *Nectria*). — Perithecia superficialia, solitaria v. parce cæspitulosa, tenuia, membranacea, setulis spinuliformibus albis vestita; contextu subhyalino, prosenchymatico. Asci ovoidei, octospori. Sporidia fusoidea, pluricellularia, hyalina. Pseudoparaphyses e cellulis globulosis majusculis conflatae. — A gen. *Calonectria* et *Ophionectria* imprimis peritheciis aculeolatis distinctum genus.

1. *Trichonectria aculeata* Kirschst., l. c. p. 60. — Charact. generis. 5016
 Perithecia globoso-depressa, rubenti-flavida, tenera, aculeolis 80 \times
 14 vestita, 200-300 μ . diam.; ascii 50-65 \times 18-25; sporidia disticha,
 denique 8-cellularia, recta, fusoidea, 35-54 \times 5-6.

Hab. in cortice trunci adhuc stantis, emortui Abietis ex-
 celsæ in silvis Borussiæ.

TRELEASIA Speg. — Syll. XIV p. 640.

1. *Treleasia ? musicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 5017
 (1909) p. 411, cum icon. — Peritheciis constipatis subiculo gossy-
 pino obovolutis 60-65 μ . diam., 100-120 μ . long., supra in ostiolum
 cylindraceum 60-200 \times 20-30 productis; ascis ellipsoideo-fusoideis
 basi cuneatis breviter tenuiterque pedicellatis, 75-80 \times 15, a paraphy-
 satis, tetrasporis; sporidiis lineariforme-fusoideis acutissimis, primo con-
 tinuis dein 3-septatis, non constrictis, 60-75 \times 7-8.

Hab. ad rhachides putrescentes Musarum, La Plata Rep.
 Argentina Amer. austr. — Species a *T. Sacchari* Speg. peritheciis
 minoribus, ascis gracilioribus evidentius pedicellatis et præcipue
 sporidiis 3-septatis recedens.

- COPRANOPHILUS** Speg., An. Mus. Nac. Buenos Aires t. XIX (1909)
 p. 410 (Etym. *copranon* fimum et *philos* amicus). — Perithecia
 cæspitosa, cylindraceo-conoidea, albicantia; ascii ellipsoidei subses-
 siles, a paraphysati octospori; sporidia angustissime lanceolata 1-
 septata, hyalina, ascum subæquantia. — Genus pulchellum *Trelea-*
siae cognatum, fimicola.

1. *Copranophilus spinuliformis* Speg., l. c. p. 410, cum icon. — Acer- 5018
 vulis subglobosis parvis, 3-4 mm. diam., albo-cinerellis, spinuloso-
 hirtis; peritheciis constipatis, globosis, ostiolo corniformi quadruplo
 longiore armatis, totis 100-120 μ . diam., 100-150 μ . alt.; ascis
 constipatis ellipsoideis, sessilibus, 80 \times 30, a paraphysatis; sporidiis
 subclavulatis, apice altero acutissimis altero obtusiusculis, 60-70 \times 5,
 diu continuis, serius 1-septatis.

Hab. in alveolis Coleopterorum in fimo vaccino arido pr.
 La Plata Rep. Argentina Amer. austr.

TUBEUFIA Sacc. et Penz. — Syll. XIV p. 652.

1. *Tubeufia Helicomycetes* v. Höhn. Fragm. Myk. IX. (1909) in Stzb. 5019
 k. Ak. d. Wiss. Wien, CXVIII, Abt. I, pag. 1477. — Subiculo
 in maculis nigricantibus insidenti, tenui, effuso, ex hyphis 4-5 μ .

lat. constituto, conidiis *Helicomyctis* (hyalinis v. leniter cyaneis 150 \times 3-4,5, septatis) tecto; peritheciis gregariis, erectis, elongatis, 250-300 μ . alt., 130-150 μ . latis, carnosso-membranaceis, basi albis v. leniter cyaneis, supra flavidis, apice obtusulis ochraceis, infra levibus supra asperulis; contextu parenchymatico; paraphysibus filiformibus, 1-1,5 μ . cr., supra nodoso-ramosis, numerosis; ascis cylindraceis, supra rotundatis tunica crassa præditis basi in pedicellum brevem angustatis, 150-170 \times 12-13, suboctosporis; sporidiis filiformibus, 4 μ . latis, hyalinis, demum cyanescensibus, septatis, articulis 5-7 μ . long.

Hab. in graminaceis emortuis, Biberbach prope Sonntagsberg Austriae-inf. (STRASSER).

BARYA Fuck. — Syll. II p. 563, IX p. 997.

1. **Barya parasitica** Fuck. — Syll. II, pag. 562 et IX, pag. 997 — 5020

var. *cæspitosa* Peck 43 Rep. (1890) pag. 33, t. IV, f. 13-17. — Peritheciis in cæspites dense confertis et saepe in rostellum satis longum productis; ascis sporidiisque quam in typo paullo angustioribus et longioribus.

Hab. parasitica in peritheciis Bertiæ moriformis ad ligna faginea, in Mont. Catskill Amer. bor.

2. **Barya montana** Racib., Bull. Acad. Sc. Cracovie (1906) p. 909. — 5021

Peritheciis longe ovoideis, in mycelio stilbaceo subsuperficialibus, 750-900 μ . alt. et 400 μ . lat., apice rotundatis et ostiolis non emergentibus rotundis præditis, contextu flavo et firme, circum circa mycelio flocculoso albo obductis; ascis aparaphysatis longe linearibus apice acute conicis ibique incrassatis, octosporis, 300 \times 4-5; sporidiis filiformibus hyalinis rectis v. spiralibus dein in ipso asco in articulos innumeros lineares secedentibus.

Hab. ad Araneas in ramis Podocarpi cupressinæ, in M. Gedeh ins. Javæ. — Status conidicus *Stilbi* formam sistit.

3. **Barya salacensis** Racib., Bull. Acad. Sc. Cracovie (1906) p. 909. — 5022

Mycelio hypophyllo sulphureo, plagulas rotundas 5-7 mm. latas convexulas formante; peritheciis numerosis in medio plagulae superficialibus, globosis vel semiglobosis, 0,7 mm. latis, cavitate 420 \times 300, ovato-phialiformibus, pariete crasso non omnino levi sulphureo, ostiolis planatis; ascis aparaphysatis fasciculatis, hyalinis, longe linearibus 400 μ . long. apice incrassatis et conicis, initio octosporis; sporidiis asci longitudine filiformibus spiraliter convo-

lulis dein in articulos innumeros secedentibus, 12-14 μ . cr., articulis $10 \times 2,5$, hyalinis.

Hab. ad *Aphides* in pagina inferiore foliorum *Castaneæ* argenteæ et *Lasianthi* sp., in Mont. Salak et Gedeh ins. Javae.

4. *Barya lichenophila* Ferd. et Winge, Botan. Tidsskr. XXIX (1908) 5023 p. 312, fig. 4. — Peritheciis in sicco corneis, dense gregariis, liberis, bysso argillaceo-subroseola insidentibus, eaque primum vestitis, dein subnudis, conicis, parum ventricosis, succineis vel demum fuscidulis, $350-500 \times 250-350$, ascos maturos per apicem pertusum ejaculantibus; peridio pseudoparenchymatico, parvi-cellulari, oleoso, sub vitro diaphano; filamentis byssi sub vitro hyalino-fuscidulis, crebre septatis, guttulis oleosis repletis, ad 7μ . lat.; ascis angustissime cylindraceis, apicem versus lenissime attenuatis, globulo terminali circ. 4μ . diam. instructis, postice leniter sensimque attenuatis, sessilibus, $165-175 \times 5-5,5$; sporidiis ascis adæquantibus, oboconis, eseptatis, filiformibus, $\frac{3}{4} \mu$. lat., hyalinis.

Hab. ad thallum subputridum *Cladoniæ* sub *Calluna* humi jacentem prope Borris Jutlandiæ.

OOMYCES B. et Br. — Syll. II p. 564, XVI p. 606.

1. *Oomyces javanicus* v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVI, 5024 Abt. I (1909) pag. 314, cum icon. — Stromatibus superficialibus solitariis v. 3-4 connatis globosis v. ovoideis, flavidis 0,5 mm. d.; peritheciis ovoideis quoque stromate singulis immersis, flavis 350×250 , ostiolo rotundo; paraphysibus copiosis ramosis et anastomosantibus; ascis tereti-clavatis apice rotundatis basi in stipitem brevem tenuatis $190-200 \times 14-16$; sporidiis tereti-fusoideis apice 3 μ . cr., medio 4-5 μ . deorsum attenuatis et 1,5 μ . cr., 160 μ . long., pluriseptatis, articulis superioribus 8-10 μ . mediis 4 μ . long.

Hab. in pagina inf. foliorum *Vaccinii varingæfolii*, Mt. Pangerango Javae.

2. *Oomyces incanus* Rehm, Ann. Mycol. (1905) p. 227. — Peritheciis 5025 sparsis, raro gregariis, sessilibus, lageniformibus, versus apicem attenuatis ibique apertis, scabriusculis, fuscidulis, mollibus, 500μ . alt., 350μ . lat., contextu parenchymatico, intus hyalino, extus dilute fuscidulo, siccis incano-pulverulentis; cylindraceis, apice rotundatis, c. 300×5 , octosporis; sporidiis filiformibus, continuis, rectis, hyalinis, asci longitudine $0,5-0,8 \mu$. lat., parallele positis; paraphysibus filiformibus, rectis, hyalinis, 1 μ . cr.

Hab. ad folia præteriti anni sicca Solidaginis Virgaureæ in valle Kirnitz prope Scandau, Saxonia (W. KRIEGER).

TORRUBIELLA Boud. — Syll. IX p. 994, XI p. 365, XVII p. 816.

1. **Torrubiella brunnea** v. Keissl., Ann. Mycol. VII (1909) p. 292. — 5026

Stromate subcirculari, explanato, byssaceo, c. 2-3 mm. diam., primum pallido, mox brunneo, hyphis longis, subrectis, vix ramosis, crasse tunicatis, hyalinis, demum subbrunneolis (c. 4 μ . diam.) composito; peritheciis supra stroma (imprimis margine stromatis) gregariis, numero c. 10-25, oblongo-conicis, breviter rostratis, subrectis, brunneis, pilis longis, simplicibus, subflexuosis, crasse tunicatis; leviter brunneis (c. usque ad 90 \approx 4 metientibus) tectis, c. 500 \approx 150; ascis filiformibus, numerosis, c. 270 \approx 6, 8-sporis, apice crasse tunicatis; paraphysibus paucis, filiformibus, apice leviter capitatis, sparse guttulatis; sporidiis rectis, ut videtur continuis nec in articulos secedentibus, guttulatis, c. 270 \approx 1.

Hab. in Coccide quodam foliis Melicopis insidenti, in insula Samoa Upolu prope Leulumoenga (RECHINGER).

2. **Torrubiella sericicola** von Höhnel, Sitzb. k. Ak. d. Wiss. Wien 5027

CXVIII, Abt. I (1909) p. 302. — Peritheciis subiculo parco arcte adnato insidentibus, solitariis v. seriatis v. sparsis v. saepe 2-pluribus basi connatis, flavis v. aurantiis, carnosso-membranaceis molibus, ellipsoideis conico-papillatis 160-180 \approx 95-100, extus ob celulas hemisphaericas prominulas 8 μ . diam. verruculosis; ascis copiosis clavato-cylindraceis 90 \approx 5, deorsum tenuatis, supra capitulatis, 8-sporis; sporidiis filiformibus 80-90 \approx 1,3-1,4 cr., crebro septatis, jam in asco in articulos 4-5 μ . long. dilabentibus, paraphysibus tenuissimis asco brevioribus.

Hab. in folliculis sericeis flavis Criculæ trifenestratae prope Buitenzorg ins. Javæ.

3. **Torrubiella ochracea** Patouill., Bull. Soc. Myc. Fr. XXII (1906) 5028

pag. 58. — Stromate pallide ochraceo, lanoso, effuso vel tuberculiformi; peritheciis levibus, succineis, ovoideo-conicis, 500 \approx 300, basi immersis, gregariis; ascis longissimis, 5 μ . cr., apice capitatis, octosporis; sporidiis linearibus 1 μ . cr., hyalinis, multiseptatis, in articulos cylindraceos 6-8 μ . long. dilabentibus.

Hab. in corpore Lepidopteri adulti cuiusdam, Papeenoo Polynesia. — *T. tomentosa* affinis.

HYPOCRELLA Sacc. — Syll. II p. 579, IX p. 1002, XI p. 367, XIV p. 653, XVI p. 603, XVII p. 817.

1. **Hypocrella Sydowii** Sacc. et Trott., *Hypocrella globosa* Syd., Ann. Mycol. V (1907) p. 359, non Racib. — Stromatibus omnino globosis, hypophyllis vel ramicolis, sparsis v. aggregatis, in foliis plerumque nervos sequentibus, 2-5 mm. diam., primo ochraceis, tandem atris, in sicco duris lignosis, superficie ob perithecia parum prominula verrucoso-tuberculatis, subiculo nullo; ascis longe cylindraceis, apice rotundatis, deorsum attenuatis, 70-100 \times 7-9, octosporis; sporidiis filiformibus, ascorum fere longitudine, intra ascis jam in articulos secedentibus; articulis sporidiorum oblongo-cylindraceis, utrinque rotundatis, hyalinis, 6-7 \times 2-2 $\frac{1}{2}$.

Hab. in foliis ramisque Melastomataceæ cujusdam, Sao Francisco dos Campos, Sao Paulo Brasiliæ.

2. **Hypocrella globosa** Racib., Bull. Ac. Sc. Cracovie (1906) p. 907. 5030 — Stromatibus globosis basi angustata in pagina superiori foliorum insidentibus, 2-3,5 mm. diam., cartilagineis, griseo-nigris, intus albidis; peritheciis subpiriformibus et supra collo elongato praeditis, 360-400 \times 100-122, parietibus flavo-aurantiacis, immersis sed ostiolo papilliformi, prominulis; paraphysibus nullis; ascis linearifusoideis, apice rotundatis, 160-190 \times 8, octosporis; sporidiis anguste linearibus in asco secedentibus et tunc articulis breviter cylindraceis, hyalinis levibus, 2,5 \times 1-1,5.

Hab. in foliis præcipue ad nervos Castilloæ elasticæ, Buitenzorg in ins. Java.

3. **Hypocrella Grewiae** Koord., Botan. Untersuch. (1907) pag. 179, 5031 fig. 13 III. — Stromatibus amphigenis, sparsis, carnosis, pulvinatis, sessilibus, applanatis, pulchre aurantiacis, papillato-ostiolatis, 2-2,5 mm. diam., peritheciis immersis; ascis linearibus, apice obtusis et haud incrassatis, 120-130 \times 6-8; sporidiis filiformibus 100-110 \times 1,5-2, hyalinis in articulos innumerabiles secedentibus.

Hab. in foliis vivis Grewiae Micrococcii prope Gombong Java, martio 1905 (KOORDERS).

4. **Hypocrella Schizostachyii** P. Henn., Hedw. XLVII (1908) p. 253. 5032 — Stromatibus hemisphærico-tuberiosis, carnosò-lignosis, duris, botryose, verrucosis, cinereo-testaceis, intus subaurantiacis c. 1,5-2 cm. diam.; peritheciis immersis ovoideis, ostioliis punctiformi-prominulis, rufo-brunneis; ascis cylindraceis, vertice hemisphærico rotundatis, 8-sporis, 100-160 \times 6-8; sporidiis filiformibus plurise-

ptatis, mox in asco secedentibus, cellulis cylindraceis, 5-8 \approx 1,5-2, hyalinis.

Hab. in ramulis vivis *Schizostachyi* spec., Luzon, Prov. Rizal ins. Philippin. (F. W. FOXWORTHY).

5. **Hypocrella Möllii** Koords., Bot. Untersuch. (1907) p. 179, f. 13 II. 5033
— Stromatibus carnosulis, disciformibus, 2-4 mm. diam. albis, hypophyllis, sparsis, papillato-ostiolatis; peritheciis stromate immersis; ascis linearibus 170-180 \approx 7-8, apice rotundatis et haud in crassatis, 8-sporis, a paraphysatis; sporidiis filiformibus, ascis subæquantibus, 170-175 \approx 1,5-2, hyalinis, multiseptatis, in frustula 15-17 μ . longa, utrinque truncata dilabentibus.

Hab. in foliis emortuis *Premnae* tomentosæ cultæ prope Kaliwiro prov. Kedu Java (KOORDERS).

6. **Hypocrella Engleriana** Koord., Botan. Untersuch. (1907) p. 177, fig. 13 I. 5034
— Stromatibus carnosis, pulvinatis, basi constrictis, extus fuscis, 0,5-1 mm. cr. hypophyllis; peritheciis immersis; ascis cylindraceis 60-65 μ . longis, 4-5 μ . latis, 8-sporis; sporidiis filiformibus asci longitudinem subæquantibus, 1 μ . latis, dense minute septulatis ac guttulatis, tarde in articulos secedentibus.

Hab. in foliis emortuis *Mangiferæ* indicæ Penuuggolan prov. Kedu Java (KOORDERS). — Est verisimiliter status ascophorus *Aschersoniae lecanioidis* Henn.

7. **Hypocrella Weberbaueri** P. Henn., Engl. Jahrb. XL (1907) p. 226. 5035
— Stromatibus foliicolis superficialibus, hemisphærico-pulvinatis, carnosò-corneis, aurantiacis, ostiolis obscurioribus punctoideis, 3-4 mm. diam., subiculo membranaceo, pallido c. 1 mm. lato; loculis immersis ovoideis, pallidis; ascis filiformi-fusoideis, apice attenuatis capitellatis, 1-sulcatis, 5-7 μ . latis, basi attenuatis, 8-sporis, 250-300 \approx 10-16; sporidiis flexuosis, linearibus, mox in particulas fusoides utrinque acutiusculas, 15-20 \approx 2-3 dilabentibus.

Hab. in foliis Marantaceæ cujusd., inter Monzon et Huallaga Dep. Huanaco, Peruvia (WEBERBAUER). — Ad *Möllerellam* transit.

8. **Hypocrella Warneckeana** P. Henn., Engl. Jahrb. XXXVIII (1905) p. 113. 5036
— Stromatibus carnosò-ceraceis, subrotundatis, tuberculosis, 1-1,5 mm. diam., gregarie sparsis hypophyllis, pallide flavidulis subfarinosis; peritheciis 3-15, subliberis, ovoideis v. subglobosis, pruinoso-subvelutinis, vertice poroso-ostiolatis, c. 200-250 μ .; ascis cylindraceis, apice hemisphærico-capitellatis, octosporis, 170-200 \approx 5-7; sporidiis in cellulas subfusoideas, hyalinæ, 10-12 \approx 2, dilabentibus.

Hab. in foliis *Myrianthi arborei*, Amani Ost-Usambara Africæ centr. (WARNECKE).

9. *Hypocrella coronata* v. Höhnel, Ergeb. Bot. Exp. Súbras. (1901) 5037 Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 22. — Stromate flavidò, pallido, sparso, amphigeno, superficiali, discoidèo, medio fortiter depresso, peripherice irregulariter crassè marginato, 3-4 mm. lato, in membrana 2-3 mm. lata, albida incidenti, margine aculeis plus vel minus numerosis, usque ad 1 mm. long. plures seriatis prædicto; contextu stromatico ex hyphis 4-5 μ . crassis tunica firma prædictis constituto; peritheciis omnino immersis quandoque verruciformi prominentibus, 400-500 μ . alt. 200 μ . latis, ellipsoideis, supra subcolliformi attenuatis, epapillatis; ostiolo minuto, brunneolo; parietibus 25 μ . circ. cr., subparenchymaticis; paraphysibus nullis; ascis cylindraceis elongatis 8-10 μ . cr.; sporidiis filiformibus in asco mox in articulos cylindraceos hyalinos utrinque acutos, 8-10 \times 1,5 secedentibus.

Hab. in foliis Myrtaceæ cujusdam, Mangaguá prope Santos Brasiliæ. — *H. citrinae* Speg. affinis.

10. *Hypocrella bispora* v. Höhn., Fragm. Mykol. VII (1909) in Stzb. 5038 k. Ak. d. Wiss. Wien CXVIII, p. 826. — Stromatibus amphigenis superficialibus, sparsis, ex umbrino nigris, crasse scutellatis, medio umbonatis, 1-5 mm. cr., margine rotundatis obtusis 1 mm. cr., rotundatis 4-5 mm. long. et in membrana basali facile secedente, albida, medio usque ad 200 μ . cr. incidentibus; ostiolis rotundatis depressis, non prominentibus, 20-25 μ . latis; contextu stromatico intus pallido, valido, plectenchymatico; peritheciis in stratu peripherico omnino immersis, subovoideis 220-280 \times 110-120, parietibus 12-16 μ . cr., collo usque ad 120 μ . longo, raro nullo et tunc peritheciis 160 \times 95; ascis a paraphysatis, cylindraceis, supra rotundatis, 120-140 \times 4-5 plerumque bisporis; sporidiis filiformibus ascum longitudine aequalibus, in eodem asco in articulos cylindraceos 4-6 \times 1,5 secedentibus.

Hab. in foliis Pinangæ sp. et in Coccidiis eorundem, in silva primæva Salak pr. Buitenzorg in ins. Java (SCHIFFNER).

11. *Hypocrella palmicola* P. Henn., in Voeltzkow, Reise Ostafrika III (1908) p. 29, tab. III, fig. 23. — Stromate plano-pulvinato, suborbiculari, atro-fusco c. 5 mm. diam., ostiolis granulatis; peritheciis ovoides immersis; ascis cylindraceis, apice rotundato-capiellatis, octosporis, 60-80 \times 3,5-4; sporidiis filiformibus pluriguttulatis, septulatis, 0,6-0,8 μ . cr.

Hab. ad folia Palmæ cujusdam, Ile aux Prunes, Madagascar.

12. *Hypocrella cretacea* v. Höhn., Stzb. k. Ak. d. Wissensch. Wien CXVIII, Abt. I (1909) pag. 311. — Stromatibus albis cretaceis, senio ochraceo-flavidis, pulvinatis, inæqualiter orbicularibus v. oblongis, 2,6 mm. latis, 1-1,5 mm. alt.; ostiolis griseo-brunneis punctatis, basi contractis subsessilibus; peritheciis immersis ovoides ampulliformibus collo 120 \approx 60-80, totis 500 \approx 220; paraphysibus nullis; ascis cylindricis utrinque leviter tenuatis 4-8-sporis, longitudine perithecii 5-9 μ . cr.; sporidiis filiformibus ascum subæquantibus, in articulos cylindricos, 6-9 \approx 2, jam in asco dilabentibus.

Hab. in margine vaginalium foliorum *Amomi* sp. longe seriatim disposita, in scutellis *Coccidiorum* parasitica in silvis Tjibodas ins. Java. — Affinis *Hyp. Amomi* Rac.

13. *Hypocrella botryosa* Syd., Ann. Myc. VIII (1910) pag. 40. — 5041 Stromatibus epiphyllis, superficialibus, 2-3 mm. latis, sparsis, e parte media majuscula et processibus ovato-globosis v. ovatis botryose aggregatis compositis, succineis v. succineo-aurantiacis; peritheciis omnino immersis, minutissimis, paucis in processibus sitis; ostiolis haud prominulis punctiformibus; ascis cylindraceis, apice rotundatis, octosporis, 130-225 \times 8-14; sporidiis filiformibus, mox in asco secedentibus; cellulis sporidiorum subfusoideis, hyalinis, 8-11 \approx 2,5.

Hab. in foliis vivis ? Cyperaceæ (margine acute spinulosis), Dumagnate in Cuernos Mt. prov. Negros or. in ins. Philippinens. (A. D. E. ELMER). — *Hypocrellæ Warneckeanæ* affinis.

14. *Hypocrella Amomi* Racib., Bull. Ac. Sc. Cracovie (1906) p. 908. 5042 — Stromate ex albo flavido tincto; hypothallo subrotundo, albo, acute marginato, initio suffulto, sursum in stroma album 1-2 mm. altum et usque ad 4 mm. latum abeunte, intus albo supra minute colliculoso; peritheciis in colliculis nidulantibus, phialiformibus, ostiolis longicollibus sed non emergentibus, parietibus flavis; peritheciis 210 μ . lat. collis 550 μ . long.; ascis a paraphysatis 400 \approx 8-10 sublinearibus, apice paullo crassioribus, truncatis, initio octosporis; sporidiis filiformibus stipatis mox in articulos innumeros secedentibus, articulis fusoideis 13-16 \approx 2.

Hab. parasitice ad Aphides in pagina inferiore foliorum *Amomi* sp. prope Salak ins. Javæ.

15. *Hypocrella convexa* Racib., Bull. Ac. Sc. Cracovie (1906) p. 908. 5043 — Stromatibus albis v. flavidis, globosis, 2-4 mm. cr., basi appلانatis levibusque sursum convexis, acute marginatis, coriaceo-tenui-

bus, cortice flavo 25 μ . cr. ostiolis non emergentibus, minutis, rotundis punctato; peritheciis omnino immersis phialiformibus, albo tunicatis longicollibus, 540 \times 160-190; ascis aparaphysatis cylindraceis apice subtruncatis 210 \times 15, initio octosporis; sporidiis filiformibus hyalinis mox in articulos bacillares utrinque rotundatos 5-8 \times 1 secedentibus.

Hab. in scutellis Coccidiorum in foliis Myristiceæ et Garciniæ, Depok et Buitenzorg ins. Javae.

EPICHLOË Tul. — Syll. II p. 578, IX p. 1001, XI p. 367, XIV p. 655, XVI p. 607.

1. *Epichloë Kyllingiae* Racib., Bull. Acad. Sc. Cracovie (1906) p. 902. 504⁴
— Stromate epicaulino, brunneo-nigro 2-20 mm. longo, 350-500 μ . cr., margine tenuiori nigro et sterili, pulvinato, levi vel areascendo verruculoso, intus pallide brunneolo; peritheciis ovoideo-elongatis 320-380 \times 95-120, non prominentibus; paraphysibus nullis; ascis linearibus, 180-210 \times 5, apice rotundatis, octosporis; sporidiis linearibus, hyalinis, septatis, et in articulos 1 μ . cr., etiam in asco secedentibus.

Hab. in caulibus *Kyllingiae monocephalæ*, in herbidis prope Buitenzorg ins. Java.

FLEISCHERIA Penz. et Sacc. — Syll. XVII p. 819.

1. *Fleischeria paulensis* v. Höhnel, Ergeb. Bot. Exp. Südbras 1901, 504⁵
Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) pag. 21. — Stromate valido, nigro-opaco, superficiali, minute verrucoso, rugoso, intus pallido, superficialiter sordide violaceo, rotundato-nodoso usque ad 6,5 mm. lato, basi angustato sterili et late adnato, supra in parte subdistincte limitata fertili; contextu valido parenchymatico et ex hyphis 7-10 μ . cr. constituto; peritheciis immersis confertis, elongato-ellipsoideis supra attenuatis, 350 μ . altis, 150 μ . latis, ostiolo in papilla incidenti; paraphysibus nullis; ascis numerosis, cylindricis, supra rotundatis hemisphæricis fortiter incrassatis, 200 \times 6-7, octosporis; sporidiis hyalinis ascum subæquantibus filiformibus, 1,5 μ . cr., subparallelis, septatis, sèpe in cellulas cylindraceas 6-8 μ . long. secedentibus.

Hab. in ramulis Melastomaceæ cuiusdam, Cantareira, São Paulo Brasiliæ.

DUSSIELLA Pat. — Syll. IX p. 1004.

1. **Dussiella Orchideacearum** Rick, Broteria V (1906) p. 42. — Stroma 5046
mate pulvinato; amplexicauli, late aurantiaco-volutino, irregulari,
1 cm. diam., rigido, carnoso; peritheciis congregatis in tubercula
inter se separata et rubra, ostiolis minutis prominentibus; ascis
70-80 \approx 3-5, breviter pedicellatis, octosporis; sporidiis linearibus, vix
3 μ . cr., longitudine ascii; paraphysibus purpureis, angustissimis.
Hab. in caule fructifero emortuo Orchideæ epiphytæ (?
Tillandsiæ), Rio Grande do Sul Brasiliæ.
2. **Dussiella violacea** v. Höhnel, Ergeb. Bot. Exp. Südbras. 1901, 5047
Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 21.
— Stromate rotundato-nodoso, carnoso-compacto, intus non gelatinoso, plectenchymatico et ex hyphis e hyalino violaceis septatis
4-11 μ . cr. constituto, 15 mm. lato 9-10 mm. alto, parte sterili
extus intusque plus minusve violacea, levi, minute granuloso-pilosæ,
fertili distincte limitata, pallida ob ostiola peritheciorum punctulata;
peritheciis arce gregariis subcylindraceis 700-800 μ . long.
et usque ad 180 μ . cr., collo crassiusculo usque ad 45 μ . cr. præditis;
paraphysibus numerosis, rigidis filiformibus 0,5 μ . cr.; ascis
longe pedicellatis, cylindraceis, supra incrassatis, usque ad 500 \approx
4-5; sporidiis filiformibus immaturis.

Hab. ad culmos Bambusæ, Alto da Serra prope Santos São
Paulo Brasiliæ.

CLAVICEPS Tul. — Syll. II p. 564, IX p. 998, XVI p. 609, XVII
p. 820.

1. **Claviceps Rolfsii** Stevens et Hall, Botan. Gazette L (1910) p. 462, 5048
fig. 3 a, 4. — Sclerotis e flavo griseis, globosis, maturis rugosis,
3 mm. circ. cr.; capitulo flavescenti, stipite filiformi 1-1,5 cm.
long. crassiore quam in *Cl. Paspali*; peritheciis cylindraceo-ovoideis
816 \approx 225; ascis cylindraceis 375 \approx 3; sporidiis filiformibus
260-275 \approx 0,5-1.
- Hab.* in Paspalo dilatato America bor,
2. **Claviceps Paspali** Stevens et Hall, Botan. Gazette L (1910) p. 462, 5049
fig. 1, 2, 3 b, 5. — Sclerotis e flavido griseis, globosis maturis
rugosis, 3 mm. circ. diam.; capitulo flavidulo, stipite filiformi usque
ad 1 cm. longo; peritheciis numerosis ovoideis, 340 \approx 119; ascis
cylindraceis 174 μ . longis; sporidiis filiformibus, 101 \approx 0,5-1.

Hab. in Paspalo levi et dilatato, North Carolina Amer.

bore. — Huc spectant *Sclerotium Paspali* Schw., *Sphacelia Paspali* Bornet, *Spermædia Paspali* Fr.

3. *Claviceps Sesleriae* Stäger, Centralbl. f. Bakter., II Abt. XVII 5050 (1906) p. 784. — Stromate sive sclerotio vulgo linearis-oblongo, obsolete trigono, recto v. arcuato, e parenchymate densissimo duro albido constante, cuius media parte in stellæ figuram redacta obscura; capitulis crassis, primum pallidis luteolisque, dein purpureo-violaceis; conidiis ovato-ellipsoideis 10,5-14 \times 3,5-7, nonnihil in medio constrictis prætereaque nucleolis duobus oppositis donatis.
Hab. in inflorescentiis Sesleriae cæruleæ prope Twann Helvetia.

4. *Claviceps Tripsaci* Stevens et Hall, Botan. Gazette, L (1910) p. 463, 5051 fig. 6-8. — Sclerotis levibus, ex albo brunneis vel nigris, subconoides, basi 4-5 mm. cr.; capitulo e griseo griseo-albo; stipite crasso ex albo purpureo-albido, 1-1,5 cm. longo; peritheciis numerosis ellipsoideis ore prominulis, 390 \times 153-187; ascis cylindraceis, 145-175 \times 2-3; sporidiis filiformibus 130 μ . longis; conidiis hyalinis, continuis, e fusideo lunulatis, 17,4-37,7 \times 2,9-8,7.

- Hab.* in *Tripsaco dactyloide*, America bor. 5. *Claviceps Junci* Adams, Irish Naturalist XVI, n. 5 (1907) p. 168, 5052 fig. 1. — Sporis (conidiis?) oblongo-ellipsoideis, 7-10 \times 2,8-3,5, ovaria matricis expletibus; ascis non inventis.

Hab. in ovariis *Junci glauci* in Royal Canal co. Dublin Hibernia (Ireland). — Manifeste forma conidiophora, forte *Sphaelice* sp.

BALANSIA Speg. — Syll. IX p. 999, XI p. 366, XIV p. 656, XVI p. 607, XVII p. 821. — Ad hoc genus, teste Atkinson in Journ. of Mycol. XI (1905) p. 252, essent trahendæ *Epichloe Hypoxylon* Peck et *Dothidea vorax* B. et C.

1. *Balansia gigas* Racib., Bull. Acad. Sc. Cracovie (1906) pag. 905. 5053 — Stromate (an sclerotio?) globoso, 1-2 cm. lato, intus albido et molli, extus cortice tenui flavidio-brunneo prædicto; stromatibus singulis stipitatis, 30-50 in quoque sclerotii superficie, flavidio-brunneis, 1-2 mm. cr., globosis, stipite 1-4 mm. longo præditis, rufobrunneis; capitulis intus albis, cortice firmo, brunneo-rubro tectis; peritheciis anguste phialiformibus 500 \times 110-140, immersis, ostiolis minutis; ascis a paraphysatis linearibus, 140-190 \times 3-4, octosporis; sporidiis filiformibus copiose septatis hyalinis intra ascum non sedentibus.

Hab. in inflorescentia nondum evoluta *Paspali* sp., Buitenzorg in ins. Java.

CORDYCEPS Fr. -- Syll. II p. 566, IX p. 998, XI p. 366, XIV p. 656, XVI p. 611, XVII p. 822.

1. **Cordyceps Ouwensii** v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, 5054

Abt. I (1909) p. 309, cum icon. — Stromatibus ex thorace Muscarum oriundis 4-5 mm. long. stipite circiter 200 μ . cr., cylindraceo infra capitulum inaequaliter nodosum; capitulis subglobosis basi apiceque applanatis 1 mm. latis et 0,7 mm. alt. ob ostiola verruculoso-punctatis; peritheciis in quoque stromate 50-60 immersis parallelis 800-900 \approx 180-210; paraphysibus nullis; ascis 4 μ . cr. cylindricis; sporidiis filiformibus 1 μ . cr.

Hab. in Muscis emortuis Sukabumi ins. Java (P. A. OUWENS). — Adsunt stromata conidica cylindracea 6-7 μ . longa, apice clavata, conidiis globulosis peregrinis 1 μ . diam. sterigmatibus suffultis. A cæteris speciebus Dipterigenis omnino diversa.

- 2 **Cordyceps rhizoidea** v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII 5055

Abt. I (1909) pag. 307. — Mycelio membranaceo insectum obdidente; stromata cylindrica radiciformia varie torta ex albo brunneola 7-8 cm. long., 0,5-1 mm. cr. emittente; peritheciis superficialibus cæspitose v. seriatim dispositis 360 \approx 300 pallidis; ascis subfusiformibus deorsum acutatis 160-210 \approx 13-16, octosporis; sporidiis cylindraceis utrinque acutatis unicellularibus 80 \approx 5-7.

Hab. in larvis Coleopterorum ad terram dejectis, Buitenzorg ins. Javæ (P. A. OUWENS). — In subgenerè *Racemella* locanda species.

3. **Cordyceps interrupta** von Höhnel, Sitzb. k. Ak. d. Wiss. Wien 5056

CXVIII, Abt. I (1909) p. 303 cum icon. — Stromate cylindrico 52 mm. longo, contorto et subflexuoso, atro-castaneo, basi simplici 1,5 mm. cr., infra medium in ramos ternos erectos 0,5-1 mm. cr. diviso, glabro; peritheciis hinc inde ramis innatis et cæspitulos subverticillatos prominentes efformantibus, ellipsoideis 700 \approx 300-350 atro-conico-papillatis; ascis peritheciis longitudine fragilibus, apice rotundatis et hemisphærico-incrassatis, cylindricis 3-5 μ . cr. octosporis; sporidiis filiformibus ascii longitudine parallelis 1 μ . cr. jam in asco in articulos 3-4 μ . longos dilabentibus.

Hab. in capite cuiusdam Coleopteri(?) terra dejecti, Buitenzorg ins. Javæ.

4. **Cordyceps Barberi** Giard., Compte rend. de la Soc. biol. Paris 5057

(1894) p. 823, Massee in Rev. Mycol. XX (1898) p. 88, tab. 178, f. 34-35. — Aggregata, præsertim in larvæ regione cervicali sita, 2-4 cm. alta, stipitato-clavata, tota albida v. sursum pallide succinea; parte sporigera dimidiata v. tertiam fungi partem æquante, apice acuta et sæpe curvula, 3-4 mm. cr., levi, continua, minutissime (ob ostiola) punctulata; stipite gracili, tomentello; peritheciis ovoideis, omnino immersis; ascis anguste clavato-cylindraceis, apice contracto-capitulatis, octosporis; sporidiis parallelis, leviter tortis, hyalinis, filiformibus, medio lenissime incrassatis, denique multiseptatis, 115-125 μ . longis, articulis 2-5 μ . long.

Hab. in larvis Diatrææ saccharalis in culmis Sacchari nidulantibus in insulis Barbados et Antigua Antillarum.

5. *Cordyceps clavulata* (Schw.) Ell. et Ev. North Am. Pyrenom. 5058 p. 61, t. XV, *Xylaria clavulata* (Schw.) B. et C. — Syll. I p. 327. — Stromate simplici, clavato; stipite cinereo circ. 3 mm. alt., $\frac{1}{4}$ mm. cr. in capitulum ovoideum v. ellipsoideum, 1 mm. long., 0,5 mm. cr., peritheciis prominulis rugulosum producto, ostiolis vix pertusis; ascis subsessilibus, medio crassioribus, sursum tenuatis sed apice rotundatis, 80-95 \times 8-10; sporidiis filiformibus, multiseptatis, 40-70 \times 1,5-2, articulis 3-5 μ . long.

Hab. ad scutella Lecanii ad ramos Fraxini, Prini, Clethræ, Carpinii, New York, Newfield Canada Amer. bor. — An diversa a *Cord. pistillarieformi* B. et Br. — Syll. II, p. 568.

6. *Cordyceps Voeltzkowii* P. Henn. in Voeltzkow, Reise Ostafrika 5059 III (1908) p. 29, taf. III, fig. 22. — Stromatibus solitariis, clavatis, rufo-brunneis, 4-9 cm. long.; clavulis oblongis obtusis, 1-2 cm. long., 3-10 mm. lat., stipite cylindraceo, cavo, c. 3-7,5 cm. long., 2-7 lato; peritheciis immersis, oblongo-ovoideis, ostiolis puntoideis; ascis subfusoideo-cylindraceis, apice capitellatis rotundatis, 250-300 \times 4-7, tetrasporis; sporidiis parallelis filiformibus, pluriguttulatis, septatis, 1,5-2 μ . cr.; stromatibus conidiophoris in medio stipitis sparsis, ovoideis c. 1-1,5 mm. long., 0,5-1 mm. cr., hyphis septatis ramosis, 3-8 μ . cr. rufo-brunneolis; conidiis ellipsoideis v. ovoideis, hyalinis, 6-7 \times 2-3.

Hab. ad terram in silvis, Andranohinaly Madagascar. — *C. Volkianæ* A. Moll. affinis.

7. *Cordyceps coronilla* v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, 5060 Abt. I (1909) pag. 306, cum icon. — Ochraceo-flava; mycelio discum membranaceum radiosum formante; stromate e medio disco oriundo, stipite brevi crasso 360 \times 220 prædicto et in capitulum

hemisphærico-discoideum 1,5 mm. latum et 1 mm. cr. abeunte; peritheciis in quoque capitulo 18-20 verticaliter stipatis et immersis, conicis, 900 \times 300, papillatis; ascis . . . immaturis.

Hab. in parvo hymenoptero (ex *Tenthredinideis*) prope Ignape Brasilia merid. (WETTSTEIN et SCHIFFNER). — Videtur affinis *Cord. subdiscoidea*.

8. *Cordyceps podocreoides* v. Höhnel, Stzb. k. Ak. d. Wiss. Wien 5061 CXVIII (1909) p. 308, cum icon. — Stromatibus simplicibus raro furcatis, 4-5 cm. altis, basi radiciformibus, ochraceo-flavis, sursum leviter incrassatis, capitulo globoso-ovoideo 4-6 mm. cr. 4-7 mm. alto, ex ochraceo-brunneo ob perithecia verrucoso-punctato; peritheciis immersis ovoides 400 \times 300, paraphysibus nullis; ascis cylindraceis fragilibus octosporis apice hemisphærico-incrassatis, 400-450 \times 3-5; sporidiis parallelis filiformibus 1 μ . cr. in articulos octo bacillares secedentibus.

Hab. in larvis cujusdam Insecti majusculi dejecti in Horto bot. Buitenzorg insulæ Javæ. — *C. entomorrhizæ* et *C. Glaziovii* affinis.

9. *Cordyceps Klenei* Patouill., Bull. Soc. Mycol. Fr. XXIV (1908) 5062 p. 11, cum icon. — Mycelio aurantiaco, crusta membranacea, tenui fibrillisque repentinibus, simplicibus ramosisve, larvæ corpus fere omnino obducente; stromatibus e crusta mycelii exeuntibus v. ad fibrillas erectas, graciles, ramulosas contortasque e crusta exurgentibus, prope apicem insertis, lageniformibus, aurantiacis, erectis, substipitatis, apice sterili pallidiori, obtusis; peritheciis immersis, ostiolis prominulis, contentu brunneolo, ovoido-elongatis; ascis linearibus longissimis, 3-5 μ . cr., 8-sporis; sporidiis filiformibus.

Hab. in corpore larvæ Nelei sp. Brasilia (RICK).

10. *Cordyceps unilateralis* (Tul.) Sacc. — Syll. II, p. 570. — var. 5063 *javanica* v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) pag. 305, tab. I. — Stromate filiformi curvulo nigricante 13-14 mm. basi 280 μ . diam. medio 180 apice 110; peritheciis ovoides apice acutis 300 μ . alt.; ascis 220-250 \times 8, cylindricis apice capitulatis octosporis; sporidiis 200 \times 2,5-3 in articulos 6-8 μ . long. dilabentibus.

Hab. in Formicis in Batavia ins. Java (VAN ROZENBURG).

Fam. 9. Coryneliaceæ Sacc.

CORYNELIA Achar. — Syll. II p. 813, IX p. 1073, XVI p. 650.

1. **Corynella clavata** (L.) Sacc. — Syll. IX, p. 1073 — f. *macrospora* 5064
Syd., Deutsche Zentral-Afrika Exped. (1907-1908) II Bd. p. 99.

— A typo differt sporidiis majusculis, 10-17 \times 10-14.

Hab. in foliis vivis Podocarpi milanjiani, Ruwenzori-
Africae trop.

2. **Corynella oreophila** (Speg.) Starb., Ascom. Schwed. Chaco-Cordill. 5065
Exp., Arkiv f. Bot., Bd. V (1905) p. 20, fig. 13 a-c, *C. clavata*
Auctt. p. p., *Alboffia oreophila* Speg., Fungi Arg. novi v. crit.
pag. 295. — A *C. clavata* (L.) Sacc. em. dignoscitur peritheciis
capitulis manifestim sulcis altiusculis tripartitis et est prædistincta
species; ascis 38-50 \times 20-32 (p. sp.); sporidiis 10-15 μ . diam.; sper-
matiis 5-12 \times 2,5-3.

Hab. in foliis vivis Podocarpi spec., inter Tarja et Gran
Chaco, Bolivia. — **Coryn. clavata** (L.) Sacc. — Syll. XVI, p. 650
— *C. tropica* (Awd. et Rabh.) Starb., l. c. f. 14, *Endohormidium*
tropicum Auswd. et Rbh., Hedwigia (1869) p. 89, *Trullula tropica*
Sacc. — Syll. III, p. 732 — *Corynella clavata* f. *andina* P. Henn.
Hedw. 1897 p. 230. — Hæc sp. ascis 30 \times 16 (p. sp.), sporidiis 9-11,5
 μ . diam. et præterea peritheciis cylindricis, sursum paulo angu-
stioribus, vertice truncato-obtuso, undique gibberoso-verrucosis
optime distinguitur, teste Starbäck l. c.

3. **Corynella carpophila** Syd., Engler's Bot. Jahrbüch. 45 Bd. (1910) 5066
p. 264. — Stromate atro, pulvinato, fructus sæpe omnino obte-
gente; peritheciis lageniformibus, coriaceis, atris, in collum elong-
atum cylindricum usque ad 200 μ . cr. demum apice valde dilata-
tum (usque ad 400 μ .) integrum haud furcatum desinentibus;
ascis variabilibus, mox cylindraceis, mox saccatis, octosporis, apice
obtusis, longe pedicellatis, p. sp. 18-28 \times 10-15; sporidiis mono-
distichis, primo hyalinis, dein fuscis, globosis, continuis, subtilis-
sime verruculosis, 7-10,5 μ . diam.

Hab. in fructibus Rapaneæ melanophilæ, Haenertsberg
Transvaal, Africa austr. (LANE POOLE).

Fam. 10. Microthyriaceæ SACC. ().**Subfam. 1. Microthyriæ.**Sect. 1. Hyalosporæ.*

MYIOCOPRON Speg. — Syll. II p. 659, IX p. 1053, XI p. 379, XIV p. 686, XVI p. 633, XVII p. 861.

1. **Myiocoron Euryæ** Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 377. 5067
— Peritheciis primum immersis, minutis, nigro-carbonaceis, 0,3-0,4 mm. cr., 120-135 μ . altis convexis, inordinate positis v. circinatis in maculis hypophyllis flavo-virentibus, rotundatis 5-7 mm. diam. insidentibus; paraphysibus filiformibus mox diffluentibus; ascis cylindraceis, utrinque angustatis, apice rotundatis, 80-94 \times 16, octosporis; sporidiis unilocularibus, monostichis, ovoideis, hyalinis, levibus, 16 \times 6, rotundatis.

Hab. in foliis Euryæ acuminatæ, M. Gedeh in ins. Java.

2. **Myiocoron Verbæ** Speg., Ann. Mus. Nac. Buenos Aires t. XVII (1908) p. 180. — Subiculo nullo; peritheciis laxe gregariis, subcarbonaceis, dimidiato-scutatis, 75-100 μ . diam. stellatim dehiscensibus; ascis obclavatulis superne tunica incrassata vestitis, 60-70 \times 25-30, octosporis, paraphysibus filiformibus apice subincrassatulis obvallatis; sporidiis oblique distichis, ellipsoideis, utrinque obtusis 26-28 \times 12-14, primo nubilosis, hyalinis, dein eguttulatis subchlorinatis.

Hab. ad ramulos languidos vel emortuos Ilicis paraguariensis in dumetis circa San Pedro Argentinæ Amer. austr.

3. **Myiocoron valdivianum** Speg., Fungi Chilenses (1910) pag. 103, 5069 cum icon. — Peritheciis epiphyllis laxe gregariis scutiformibus minutissimis, perforato-ostiolatis, margine denticulato-fimbriatis prosenchymatico-radiantibus, olivaceis, glabris subiculo destitutis, 75-90 μ . diam.; ascis subcylindraceis, a paraphysatis, breviusculae pedicellatis, 27-30 \times 5-6; sporidiis oblanceolatis pusillis, hyalinis, 8 \times 2.

Hab. ad folia viva Eugeniacæ cujusdam in silvis Bahia Corral Chile Amer. austr.

(*) Cfr. conspectum generum *Microthyriacearum* didymosporarum a prof. v. Höhnel propositum in *Fragm. zur Mykol.* X, p. 14 (1910).

4. **Myiocopron argentinense** Spegazz., An. Mus. Nac. Buenos Aires 5070 t. XIX (1909) p. 423. — Maculis nullis; peritheciis sparsis arcte matrici adnatis, orbicularibus, 120 μ . diam., astomis opacis margine non fimbriatis; ascis fusoideis, 50 \times 9-10, octosporis, aparaphysatis; sporidiis elongato-ellipsoideis, subnavicularibus, oblique distichis utrinque subobtusis, 14-15 \times 3-3,5, hyalinis, non v. grosse 1-2-guttulatis.

Hab. ad caules dejectos arescentesque Fœniculi piperiti, Santa Catalina, prope Buenos Aires, Argentina, Amer. austr.

COSCINOPELTIS Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 425 (Etym. *coscinon* cibrum et *pelte* scutum). — Stromata orbicularia dimidiato-scutiformia, superne laxe punctulato-ostiolata, inferne reticulato-loculigera; asci octospori; sporidia 1-locularia brevia, hyalina. — Est *Polystomella* amerospora et hyalospora.

1. **Coscinopeltis argentinensis** Speg., l. c. p. 425, cum icon. — Stro- 5071 matibus arcte matrici adnatis 1-5 mm. diam. nigris non vel vix nitidulis; ascis ellipsoideo-ovovatis apice rotundato-subtruncatis crassissimeque tunicatis, basi abrupte cuneatis, brevissime nodulo-seque pedicellatis 50-60 \times 12-20, octosporis, paraphysatis; sporidiis distichis v. conglobatis, navicularibus, 12-14 \times 6-7, hyalinis.

Hab. ad folia viva *Heteropteridis* cujusdam in silva Bocadal, Argentina Amer. austr.

Sect. 2. Phæosporæ.

VIZELLA Sacc. — Syll. II p. 662, IX, p. 1054, XVII p. 861.

1. **Vizella Urvilleana** Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 424, cum icon. — Peritheciis sparsis coriacellis ostiolatis marginie integerrimis, 200-250 μ , diam.; ascis cylindraceis basi cuneatis breviter crasseque pedicellatis, 80-90 \times 18-20, octosporis, paraphysatis; sporidiis distichis utrinque rotundatis ellipsoideo-navicularibus, 18-20 \times 8-10, non v. minute 2-guttulatis, primo hyalinis dein fuligineis.

Hab. ad folia arida Panici Urvilleani, Juarez Celman, prope Cordoba, Argentina Amer. austr.

Sect. 3. Hyalodidymæ.

MICROTHYRIUM Desm. — Syll. II p. 662, IX p. 1055, XI p. 379, XIV p. 687, XVI p. 635, XVII p. 862.

1. **Microthyrium aberrans** Speg., Fungi Chilenses (1910) pag. 106, 5078 cum icon. — Peritheciis hypophyllis sparsis v. perlaxe gregariis, superficialibus dimidiato-scutatis, astomis, atris, glabris, prosenchymaticis, ambitu areola angustissima subciligera cinctis, 100-180 μ . diam.; ascis ovatis v. obovatis, apice tunica crassissima umbo-niformi donatis, aparaphysatis, octosporis, 20-25 \times 12-15; sporidiis 3-4-stichis, hyalinis e cylindraceo oblanceolatis, 1-septatis, parvis, 10-11 \times 3.

Hab. in foliis siccis non dejectis Lardizabalæ biternatae in silvis prope Cerro Caracol de Concepcion Chile Amer. austr.
— An cum *Asterina labecula* Mont. comparanda?

2. **Microthyrium patagonicum** Spegazz., An. Mus. Nac. Buenos Aires 5074 t. XIX (1909) p. 426. — Peritheciis saepius hypophyllis, sparsis v. laxe gregariis orbicularibus 100-150 μ . diam., planiusculis, astomis, margine denticulatis obsolete fimbriato-radiantibus; ascis subcylindraceis basi breviter crasseque attenuato-pedicellatis, 40-45 \times 10, octosporis, aparaphysatis; sporidiis distichis rectis vel leniter curvulis, 15-16 \times 2,5-3, loculis æquilonigis eguttulatis, infero graciiore, hyalinis.

Hab. ad folia viva Mayteni magellanicae prope Lago Palomo, Patagonia, Argentina America austr. — *Micr. punctiformi* (B. et C.) Sacc. cognatum.

3. **Microthyrium eucalypticola** Speg., An. Mus. Nac. Buenos Aires 5075 t. XIX (1909) pag. 426. — Peritheciis plus minusve densiusculae gregariis orbicularibus 150 μ . diam., minute ostiolatis, margine vix denticulatis, membranaceo-coriaceis, opacis; ascis obclavatis, apice subtruncato-rotundatis, basi abrupte cuneatis brevissime umbonato-pedicellatis, 30-40 \times 8-9, octosporis, aparaphysatis; sporidiis ellipsoideo-elongatis 1-septatis ad septum non constrictis, 12-14 \times 3, loculis æqualibus non v. minute 2-guttulatis, hyalinis.

Hab. ad folia dejecta subputrescentia Eucalypti globuli in Parque La Plata, Argentina America austr. — *M. microscopico* Desm. peraffine.

4. **Microthyrium confertum** Theiss., Ann. Mycol. VII (1909) p. 352. 5076 — Mycelio aereo nullo; peritheciis epiphyllis, applanato-scutellatis,

dense confertis, totam foliorum superficiem æqualiter denseque atro-punctantibus, 150-200 μ . diam., poro pertuso, textura radiata, cellulis perbrevibus, cylindraceo-rhomboideis; ascis tereti-clavatis, fere sessilibus, c. 42-55 \times 16-18 v. etiam elongatioribus, medio ventriculosis usque ad 65 \times 15, 8-sporis; sporidiis exacte ovatis, hyalinis, ad septum non v. vix constrictis, 12-15,5 \times 8,5-11, loculo supero (majore v. æquali v. minore) late rotundato, infero subconice angustato.

Hab. in foliis vivis *Myrrhinii rubriflori* in silva, Sao Leopoldo, Rio Grande do Sul Brasilia.

5. *Microthyrium appланatum* Rehm, Ascom. Exsicc. fasc. 41, n. 1774, 5077 Ann. Mycol. VI (1908) p. 122. — Peritheciis epiphyllis, gregariis, in folio haud decolorato sessilibus, dimidiatis, appланatis, poro perspicuo pertusis, distincte orbicularibus, hyphis radiantibus mollibus, tenuissime pseudoparenchymatice fuscidule contextis, glabris, nigritulis, 0,3-1 mm. diam.; ascis ovoideis, 30-35 \times 20, octosporis; sporidiis clavatis, utrinque obtusis, medio septatis, paullulum constrictis, hyalinis, 15 \times 6, distichis; paraphysibus nullis.

Hab. ad folia viva Myrtaceæ, Sao Leopoldo Rio Grande do Sul Brasilieæ (RICK).

6. *Microthyrium malacoderma* (v. Höhn.) Sacc. et Trott. *Microthyria* 5078 *ella malacoderma* v. Höhn. Fragn. Mykol. VIII (1909) in Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, pag. 1173. — Peritheciis hypophyllis, mollibus, depressis, semiscutatis, sparsis, rotundatis, usque ad 1 mm. diam., 70-100 μ . cr., griseo-brunneolis, albido-griseis, ob drusas crystallinas pulveraceis, medio obscurioribus levibusque, margine pallidioribus tenuiter circumscriptis, astomis; contextu tenuiter membranaceo, parenchymatico, ad marginem tenuior fibrilloso, maturo irregulariter in areolas fisso; stratu basilari tenui minute subplectenchymatico, hyalino; paraphysibus numerosissimis, atypicis, ramosis, plectenchymatico-floccosis, mucosis; ascis ovoideo-ellipsoideis, sessilibus, tunica uniformiter 5-6 μ . in-crassata (immatura usque ad 16 μ .), octosporis, 120-140 \times 80-85; sporidiis subparallelis, hyalinis, regulariter obtuse granulosis, contentu sordide pallide brunneolo, bilocularibus, rectis v. plerumque curvulis, cylindraceis apice obtusis, septo non constrictis, 85-100 \times 18-24. J -.

Hab. in foliis Paratropiæ sp. in silvis Tjibodas in ins. Java.

— *Mic. Rickii* (Rehm) v. Höhn. affine.

7. *Microthyrium microscopicum* Desm. — Syll. II, pag. 662 — var. 5079

majus Speg., Fungi Chilenses (1910) p. 105. — Peritheciis 100-150 μ . diam., coriaceis, ostiolo angusto 10 μ . lato; ascis 45 \times 8-9, apophysatis; sporidiis 12-14 \times 4-5.

Hab. in foliis dejectis siccis Perseæ Lingue in silvis Cerro Caracol de Concepcion, Chile, Amer. austr. — *Var. minus* Speg., l. c. — Differt a precedente peritheciis 110 μ . diam., subdiaphanis, ostiolo 20 μ . diam. præditis; ascis 35-40 \times 8, paraphysatis; sporidiis 10-11 \times 4. — In iisdem foliis prope Ciudad de Valdivia Chile Amer. austr.

8. **Microthyrium ? astomum** Speg., Fungi Chilenses (1910) pag. 104, 5080 cum icon. — Peritheciis hypophyllis subsparsis dimidiato-lenticularibus, pusillis, astomis glabris nigris subiculo destitutis, 50-60 μ . diam.; ascis paucis ovatis, percrasse brevissimeque pedicellatis, apophysatis, 30 \times 14; sporidiis oblanceolatis, hyalinis, parvis, 1-setatis non v. vix constrictis, 10 \times 3.

Hab. in foliis dejectis Cryptocaryæ Peumi, in silvis Cerro Caracol de Concepcion Chile Amer. austr.

9. **Microthyrium disjunctum** Rehm, Ascom. Exsicc. fasc. 41, n. 1775, 5081 Ann. Mycol. VI (1908) p. 123. — Peritheciis in maculis orbicularibus epiphyllis, dilute nigritulis, interdum confluentibus, 4-7 mm. lat., plurimis gregariis, sessilibus, atris, dimidiatis, semiglobosis, poro pertusis, 120-150 μ . diam., haud confluentibus, prosenchymatice ex hyphis fusco-flavidulis, centrifugis contextis, ad marginem radiantibus in hyphas mycelii tenuissime flavidulas, 2-3 μ . cr., interdum rectangulariter ramosas et 2-3 parallele conglutinatas, ansas magnas componentes abeuntibus, hyphopodiis carentibus; ascis clavatis, sessilibus, 45-48 \times 10-12, octosporis; sporidiis clavatis, supra medium septatis, cellula superiore plerumque rotundata, inferiore acutata, haud constrictis, hyalinis, 10-12 \times 4,5-5, distichis; paraphysibus subramosis.

Hab. ad folia viva Solani, Sao Leopoldo Rio Grande do Sul Brasilæ (RICK). — Ab *M. confuente* Pat. mycelio validiori, peritheciis confluentibus diversum.

10. **Microthyrium crassum** Rehm in Theiss., Ann. Mycol. (1910) 5082 p. 463. — Peritheciis gregariis, plerumque epiphyllis, crassiusculæ orbicularibus subconice cupulato-elevatis, concentrica zonatis, atris, basim versus brunneolis, glabris, opacis. contextu radiato, ambitu determinato non fimbriato, 0,5-0,8 mm. diam., saepius confluentibus, maculas flavescentes in folio efficientibus, arcte adhaerentibus; ascis cylindraceis v. elongato-saccatis, breviter pedicellatis, superne

rotundatis, tunica crassa mucosa, abundanter paraphysatis, 8-sporis, 55-65 \times 15, cylindraceis usque ad 75 \times 10-12; paraphysibus tenuibus ascis superantibus, apice paullo incrassatis; sporidiis distichis, hyalino-viridulis, 1-septatis, non constrictis, oblongis, rotundatis, cellulis fere æqualibus, superiore paullo crassiore, 14-16 \times 5.

Hab. in foliis vivis Solani boerhaviifolii in silvis, São Paulo, Rio Grande do Sul, sociis *Asterina vagante*, *Micropeltide vagabunda* et *Meliola glabra*.

11. **Microthyrium Laurenti** P. Henn., Mission E. Laurent fasc. III 5083 (1906) pag. 317. — Peritheciis amphigenis sparsis, minutis, dimidiato-orbicularibus, atris, hyphis radiantibus fusco-olivaceis, 130-160 μ . cinctis, centro pertusis; ascis clavatis, apice rotundato-obtusis, tunicatis, octosporis, 25-35 \times 8-11; paraphysibus ramosis filiformibus hyalinis, 1 μ . cr.; sporidiis subdistichis oblongo-ellipsoideis v. subclavatis, curvulis, medio 1-septatis, guttulatis, hyalino-cyanescentibus, 10-14 \times 3,5-4,5.

Hab. in foliis Coffeæ sp. Ubangi, Congo, Africa. — St. pyrenoid.: *Leptothyrium Laurenti* P. Henn., sporulis innumeris, fusoides, utrinque acutis hyalinis, 3-4 \times 0,5-0,7. — A *Microth. Coffeæ* omnino distinctum.

12. **Microthyrium leopoldvilleanum** P. Henn., Mission E. Laurent 5084 fasc. III (1906) pag. 317. — Peritheciis epiphyllis, sparsis, dimidiato-orbicularibus, atris, 250-300 μ . diam., marginatis, contextu atro-ærugineo, radiato-celluloso; ascis clavatis, vertice crasse tunicatis, rotundatis, octosporis, paraphysatis, 80-90 \times 25-30; sporidiis subdistichis, oblongis, subclavatis, hyalinis, medio 1-septatis, 28-30 \times 10-12.

Hab. in foliis vivis Coffeæ sp. Leopoldville, Congo, Africa. — *Micr. Coffeæ* affinè sed peritheciis, ascis sporidiisque satis diversum.

13. **Microthyrium rimulosum** Spegazz., An. Mus. Nac. Buenos Aires 5085 t. XIX (1909) p. 426. — Maculis pallescentibus diffusis; peritheciis laxissime gregariis pusillis, orbicularibus, 120 μ . diam., astomis sed centro reticulato-rimulosis, margine integerimis, subcoriacellis non nitentibus; ascis ovoideis sessilibus, apice crassissime tunicatis basi vix papillato-pedicellatis, 25-30 \times 15-18, octosporis, a paraphysatis; sporidiis elongato-obovatis, 1-septato-constrictulis, 10 \times 3-4, hyalinis.

Hab. ad ramulos vivos Sapii salicifolii culti in Santa Catalina prope Buenos Aires, Argentina America austr.

14. *Microthyrium mebelense* P. Henn., in Fl. du Bas- et Moy.-Congo, 5086 in Ann. Mus. du Congo v. II, fasc. III (1908) p. 227. — Peritheciis epiphyllis gregarie sparsis, dimidiato-scutellatis, atris c. 1 mm. diam., contextu cellulosis olivaceo-fuscis; ascis ovoideis vertice crasse tunicatis, 8-sporis, aparaphysatis; sporidiis conglobatis longe fusoideis utrinque obtuso-rotundatis, medio 1-septatis haud constrictis, subinæquilateralibus, hyalinis, 30-40 \times 8-10.

Hab. in foliis indeterminatis, Mbela Congo, Afr. trop. (VAN DERYST).

15. *Microthyrium Phegopteridis* P. Magn., Abh. naturh. Ges. Nürnb. 5087 XVI (1906) p. 74. — Scutellis e rotundato ovoideis, superficialibus, nigris, depresso, 78,45 \times 104,6, v. 83,68 \times 146,64, v. 104,69 \times 141,41, peripherice pseudoparenchymatice subradianibus; peritheciis solitariis sparsis non crustiformi confluentibus; ascis sporidiisque ignotis.

Hab. in foliis et petiolis Phegopteridis Dryopteridis, prope Feucht Franconia (ZAHN). — A *M. litigioso* peritheciis non confluentibus et cellulis pseudoparenchymaticis minoribus distinctum. Species, ignota fructificatione, omnino dubia.

CLYPEOLUM Speg. — Syll. II p. 667. IX p. 1061, XI p. 380, XIV p. 688, XVI p. 637.

1. *Clypeolum vulgare* Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 384. 5088 — Peritheciis gregariis, depresso, rotundatis, nigris, astomis, sed demum scutellato-erumpentibus 0,5-0,7 mm. diam.; hyphis aereis nullis; ascis globosis v. breviter ovoideis, 17-21 μ . diam., crasse tunicatis, octosporis; paraphysibus nullis; sporidiis ovoideis v. subclavatis, bilocularibus, levibus, hyalinis, 9-12 \times 3-4.

Hab. epiphytice ad folia arborum variarum: *Hydnocarpus*, *Garcinia*, *Canarium*, *Tjampea*, *Payena*, *Depok*, *Buitenzorg* in ins. Java.

2. *Clypeolum quercinum* (Schulz.) Sacc. et Trav. — Syll. XIX, p. 360 5089 — *Thyriascus quercinus* Schulz. in Flora (1877) p. 51, t. II, f. 3. — Peritheciis scutiformibus, firmis, corneis, puncti magnitudine, nempe 250-330 μ . diam., nigris, adultis a matrice secedentibus; ascis erectis, sessilibus, obovato-vesiculiformibus, octosporis; sporidiis irregulariter stipatis, bilocularibus, loculo superiore subgloboso, infero tenuiore subconoideo, hyalinis, 19- \times 10.

Hab. in ramis corticatis *Quercus Roboris*, prope Eperies Hungariae, socia *Clithri quercina*.

CHÆTOTHYRIUM Speg. — Syll. IX p. 1061, XVI p. 636.

1. **Chætothyrium punctiforme** Bick, Broteria V (1906) pag. 40. — 5090

Mycelio aëreo nullo; peritheciis hypophyllis, superficialibus, gregariis, punctiformibus, 40-50 μ . diam., radiantibus, setulis repentinibus, conspersis; setulis 2-3 μ . latis, ferrugineo-brunneis, vix ramosis, septatis, undulatis, usque ad $\frac{1}{4}$ mm. longis, aliquoties fasciculatis; ascis ovalibus v. oblongis, vix 30-40 \times 10, octosporis; sporidiis cylindraceis v. oblongis, uniseptatis, in septo vix constrictis, 10-15 \times 3-5, hyalinis, parte inferiore angustiore.

Hab. in foliis vivis Myrsines sp. Rio Grande do Sul Brasilæ.

TRICHOHYRIUM Speg. — Syll. IX p. 1062.

1. **Trichothyrium densum** Raciborski, Bull. Ac. Sc. Cracovie (1909) 5091

p. 380. — Plagulis amphigenis rotundatis, nigris, 0,3-0,8 cm. latiss.; cellulis hypharum cylindraceis 18-22 \times 8; hyphopodiis bilocularibus ovoideis 22-28 \times 10-13; peritheciis rotundatis, 100-150 μ . diam., ostiolo rotundato 16-18 μ . diam. præditis; ascis octosporis 30-40 \times 14-16; sporidiis hyalinis 14-17 μ . long. clavulatis, primum bi-dein trilocularibus, 3,5-4 μ . cr.

Hab. in foliis Stechelocarpi Barahoh, Depok prope Buitenzorg Java.

2. **Trichothyrium jungermannioides** Raciborski, Bull. Ac. Sc. Cracovie 5092

(1909) pag. 379. — Plagulis amphigenis rotundatis 1-2 mm. cm. diam., laxe dendriticis ex hyphis cellulis cylindraceis 26-34 \times 8-13 formatis et lateraliter hyphopodia bicellularia apice obtusa 38 \times 18 gerentibus constitutis; thallo 100 μ . lato lobato lobis apice rotundatis; peritheciis ad marginem thalli numerosis, junioribus subreniformibus, maturis rotundato-depressis, nigris, usque ad 100 μ . diam. margine in hyphas desinentibus; paraphysibus nullis; ascis clavato-ovoideis, 37 \times 16-18, octosporis; sporidiis ovoideis, 12 \times 3-4, medio transverse uniseptatis, hyalinis, levibus.

Hab. in foliis Connari sp., Depok in ins. Java.

3. **Trichothyrium chilense** Speg., Fungi Chilenses (1910) p. 106, eum 5093 icon. — Vittis subiculi alternatim ramosis tenuibus, 5-15 mm. long., 80-200 μ . diam., nigris superficialibus, pinnatim prosenchymericis, saepius epiphyllis; peritheciis dimidiato-septatis, pusillis, 75-80 μ . diam., ostiolo 15 μ . diam. præditis, laxe vittis insidentibus; ascis obovatis brevissime crasseque pedicellatis, 30 \times 14, apophysatis, octosporis; sporidiis 3-stichis oblanceolato-biconoideis, hyalinis, parvis 10 \times 4, uniseptatis, constrictis.

Hab. in foliis Eugeniæ sp. in silvis Bahia de Corral Chile Amer. austr.

POLYSTOMELLA Speg. — Syll. IX p. 1063, XVI p. 639, XVII p. 865.

1. **Polystomella nervisequia** v. Höhn. Fragm. Mykol. VII (1909) in 5094
Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 850. — Stromatibus superficialibus, opace nigris, rugulosis, minute granulosis, irregulariter noduloso-elongatis, usque ad 700 μ . long., 500 μ . alt., coriaceo-carbonaceis, facile secedentibus, plerumque in maculis hypophyllis indeterminatis seriatim insidentibus; contextu stromatico parenchymatico; loculis rotundato-ovoideis, 100-120 \times 50-100, immersis, approximatis, perpendiculariter dispositis, apice ostiolo rotundato 45 μ . lato apertis; ascis clavatis, supra rotundatis ibique tunica usque ad 5 μ . incrassata præditis, basi in pedicellum brevem crassum attenuatis, octosporis, 60-78 \times 13-14; paraphysibus genuinis nullis; sporidiis hyalinis di- v. tristichis, elongato-cylindraceis, utrinque rotundatis, uniseptatis, 16-22 \times 4-5.

Hab. in foliis Berliniæ sp., Usambara or. Africæ (ZIMMERMANN). — Cl. v. Höhn. l. c. contendit hoc genus cum *Microcyclo* Sacc. et Syd. collidere et tunc *Dothideaceas* spectare, quod hucque non satis probatum videtur.

Sect. 3. Phæodidymæ.

SEYNESIA Sacc. — Syll. II p. 668, IX p. 1064, XI p. 381, XIV p. 689, XVI p. 639, XVII p. 865.

1. **Seynesia elegantula** Syd., Engler's Bot. Jahrbüch. 45. Bd. (1910) 5095
p. 263. — Peritheciis amphigenis, præcipue epiphyllis, dimidiato-scutatis, 400-600 μ . diam., atris, irregulariter dehiscentibus, rugulosis, ambitu in hyphas radiantes fuscas septatas simplices vel ad apices versus dichotome ramosas longissimas usque 1 mm. longas et 6-7,5 μ . numerosas amœne abeuntibus; mycelio proprio parco v. subnullo; ascis clavatis, apice rotundatis, valde incrassatis, breviter stipitatis, 60-85 \times 20-28, octosporis; sporidiis distichis, oblongatis, medio constrictis, utrinque rotundatis, primo hyalinis, dein brunneis, 25-32 \times 9-11, loculo inferiore plerumque leniter angustiore; paraphysibus filiformibus.

Hab. in foliis *Xymali* spec., Lamuru Massai Africæ trop.
(SCHEFFLER).

2. **Seynesia Heteropteridis** Theiss., Broteria (1910) p. 9. — Peritheciis dimidiatis, mycelio laxo insidentibus v. etiam densius ab eo involutis, orbicularibus, radiatis, maculas atras tenues 1-3 mm. latas efformantibus; hyphis 7-8 μ . cr., hinc inde nodulosis, hypopodiis destitutis; ascis ovoideis v. urceolatis, 60-65 \times 35-45, sessilibus; sporidiis brunneis, 1-septatis, constrictis, loculis subæqualibus, rotundatis, 24-28 \times 14-17.

Hab. epiphylla in foliis vivis *Heteropteridis*, Sao Leopoldo Brasiliæ.

3. **Seynesia ilicina** Syd., Ann. Mycol. VII (1909) pag. 170. — Pleurumque epiphylla, maculas atras orbiculares 3-10 mm. diam. formans; hyphis repentibus, fuscis, ramosis, c. 5-6 μ . crassis, hypopodia pauca ovata gerentibus; peritheciis dimidiatis, gregariis, atris, cellulosis, 100-150 μ . diam., irregulariter dehiscentibus; ascis oblongo-clavatis, sessilibus, apice rotundatis, crassiuscule tunicatis, 35-55 \times 10-16, octosporis, paraphysatis; sporidiis distichis, oblongis v. oblongo-fusoideis, medio v. circa medium septatis vix constrictis, fuscis, 15-20 \times 4-5.

Hab. in foliis *Ilicis integræ*, Komaba-Tokyo, Japonia.

4. **Seynesia Licaniae** Rehm, Ann. Mycol. VII (1909) p. 538. — Muculis epiphyllis fuscidulis, suborbicularibus, tenuissime arachnoideis, 3-5 mm. diam.; peritheciis dimidiatis, poro pertusis, nigris, glabris, prosenchymatice radiatim contextis, usque ad marginem peritheciæ, fuscis 250 μ . diam., gregarie sessilibus, in hyphis longis rectis fuscis, 5-6 μ . cr., septatis, rectangulariter ramosis sitis; hyphopodiis parentibus; ascis ovalibus, 30-33 \times 20, 8-sporis; sporidiis oblongo-cuneatis, inæqualiter 2-cellularibus, 15-17 \times 6-7, cellula superiore demum subglobosa, c. 6 μ . longa, primitus hyalinis, demum fuscidulis; paraphysibus conglomeratis.

Hab. ad folia *Licaniae*, prope Pará Brasiliæ (C. F. BAKER).

— *Seynesia Schroeteri* Rehm, sporidiis multo minoribus diversa.

5. **Seynesia chilensis** Speg., Fungi Chilenses (1910) p. 107, cum icon. 5099
— Peritheciis hypophyllis sparsis, maculis subiculoque plane destitutis, superficialibus, dimidiato-scutatis, astomis, coriacellis, margine crenulatis, 250-400 μ . diam.; ascis mox diffluentibus; sporidiis elliptico-obovoideis mediocribus, 1-septato-constrictulis, fuligineis, 25-28 \times 12-14.

Hab. in foliis vivis *Eugeniae* sp. in silvis Bahia de Corral

Chile Amer. austr. — Sec. Spegazzini l. c. p. 108 ad hoc genus spectat etiam *Lembosia Drymidis* (Lév.) Mont.

6. **Seynesia montana** (Racib.) Sacc. et Trott., *Trichopeltis montana* 5100

Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 378. — Peritheciis epiphyllis sub thallo inordinate nidulantibus tectis, subgloboso-depressis, 170-200 μ . diam. ostiolo minuto rotundato apicali præditis; thallo angulo unistratioso e cellulis 5-10 \approx 2,5-5 brunneonigris constituto, ad marginem longe lacinulato; ascis clavato-cylindraceis, rectis v. curvulis, 36-50 \approx 8-10, octosporis; sporidiis bilocularibus, levibus, longe ovoideis, 11-14 \approx 3-4, pallide brunneis.

Hab. in foliis Vaccinii Teysmanniani in M. Gedeh et Pangerango in ins. Java. — Ob sporidia bilocularia brunnea potius *Seynesiae* quam *Trichopelti* proxima.

7. **Seynesia scutellum** Syd. Ann. Mycol. VIII (1910) p. 40. — Pe- 5101

ritheciis epiphyllis, maculiformiter aggregatis v. sine ordine distributis, sed maculis propriis nullis, orbicularibus, dimidiato-scutellatis, superficialibus, facile a folio secedentibus, 350-550 μ . diam., microthyrioideo-contextis, ambitu amcane fimbriatis, poro 12-18 μ . lato pertusis; ascis clavatis, subsessilibus, 50-70 \approx 14-20, octosporis, apophysatis; sporidiis ellipsoideo-oblongis, utrinque obtusis, medio septatis vix constrictis, primo hyalinis, dein fuscis, 22-28 \approx 7-10.

Hab. in foliis Drimydis piperitæ, Pauai 2100 m. alt. in provincia Benguet, Luzon, ins. Philipp. (R. C. Mc GREGOR).

8. **Seynesia brasiliensis** Spegazz., Fungi Paulist., Rev. Mus. La Plata 5102

t. XV, p. 29. — Subculo epiphylo quandoque vix evoluto arachnoideo quandoque membranaceo arcte matrici adhærente, plagulas suborbiculares 2-5 mm. diam. sæpe confluentes efformans, hyphis reticulato-intertexis septulatis 5-6 μ . cr., constituto; peritheciis laxe gregariis vix convexulis 250 μ . diam., ostiolo majuscule 25-30 μ . diam. pertusis, coriacellis opacis, contextu indistincto ambitu vix crenulato-fimbriato; ascis antice subtruncato-rotundatis crasseque tunicatis postice cuneatis breviter crasseque stipitatis, 80-100 \approx 20-25, paraphysibus filiformibus vix longioribus densiuscule obvallatis; sporidiis oblique distichis uniseptatis, medio validiuscule constrictis, 24-25 \approx 12, loculis subæquilongis, supero ovato obtuso, infero subconoideo acutiore, diu hyalinis, postremo fuligineis.

Hab. ad folia coriacea arboris ignotæ cujusdam, Ipiranga até Cambucy Brasilia (USTERI).

Sect. 2. Hyalophragmiæ.

MICROPELTIS Mont. — Syll. II p. 669, IX p. 1069, XI p. 381, XIV p. 690, XVI p. 642, XVII p. 868.

1. **Micropeltis Wettsteinii** v. Höhnel, Ergeb. Bot. Exp. Südbras. 1901, 5103 Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 17.

— Peritheciis gregariis, non maculicolis, circinantibus, scutatis, margine denticulatis, nigris vel nigro-brunneis, nitidulis, opacis, carbonaceis, ostiolo 5-6 μ . lato, tenui-marginato, 400-500 μ . diam.; ascis numerosis, clavatis, supra rotundatis, basi in pedicellum tenuem nodoso-attenuatis, plerumque 40-48 \approx 4-5, paraphysibus filiformibus simplicibus v. ramosis, 1-1,5 μ . cr. obsitis, octosporis; sporidiis plerumque distichis, hyalinis, elongato fusoideis, utrinque acutatis, bilocularibus, demum quadrilocularibus, 9-10 \approx 2,5-3.

Hab. in pagina sup. foliorum *Anemones* Wettsteinii, M. Itatiaya 1400-2000 m. alt. Brasilia.

2. **Micropeltis clavigera** Saccardo, Fungi aliquot africani, Bol. Soc. Broteriana v. XXI (1904-1905) p. 6. — Peritheciis epiphyllis laxe et late gregariis dimidiatis, omnino planis, ambitu circularibus 400-500 μ . diam., facilime secedentibus, opace nigris, ostiolo centrali impresso 35-40 μ . diam., pertusis, contextu minute celluloso non radiante, fuligineo-cyanescente, cellulis 4-5 μ . diam., margine tenuiter fimbriato, subreticulato; ascis oblongo-clavatis, breviter tenuato-substipitatis, apice obtusis, 150 \approx 40, paraphysibus dense stipatis, hyalinis, copiosissimis, 1-1,5 μ . cr. ovallatis, octosporis; sporidiis cylindraceo-clavatis, tristichis, deorsum sensim notabiliter pectinatis, apice rotundatis, 72 \approx 14-15, constanter 4-septatis, ad septa leviter constrictis, strato mucoso tenuissimo obvolutis.

Hab. in foliis languidis *Grewia* coriacea et *Hunteria* ambientis in Camaroes Africae occid. (Communic. A. MOLLEB).

3. **Micropeltis Heteropteridis** Theiss., Ann. Mycol. VII (1909) p. 352. 5105
— Peritheciis epiphyllis, rariss, sparsis, punctiformibus, subpulvinato-scutellatis, orbicularibus, atris, vix annulo minutissimo decolorato in folio circumdatis, poro pertuso, textura radiata, margine fimbriatis; ascis ovatis v. clavato-ventricosis, 8-sporis, c. 50-65 \approx 28-35; sporidiis hyalinis oblongis, rectis, oblique monostichis, subdistichis, utrinque rotundatis, 3-6-septatis, ad septa vix constrictis, 22-28 \approx 7,5-9.

Hab. in foliis vivis Heteropteridis sp. in silvula (*capao*),
Sao Leopoldo Rio Grande do Sul, Brasilia.

4. **Micropeltis corynespora** Saccardo, Fungi aliquot africani, Bol. Soc. 5106
Broteriana v. XXI (1904-1905) pag. 6. — Peritheciis epiphyllis,
sparsis, dimidiatis, plano-convexus, ambitu circularibus, 600-800
μ. diam., facile secedentibus, opace nigris, ostiolo centrali impresso
28 μ. diam., pertusis; contextu minute celluloso, non radiato, fu-
ligineo, ambitu fere integro, subcyanescens; ascis clavatis, breviter
tenuato-stipitatis, 110-120 × 18-22, octosporis, paraphysatis, apice
rotundatis; sporidiis subdistichis, clavatis, deorsum sensim notabi-
liter tenuatis, typice 6-septatis, constrictis, 55-60 × 8, hyalinis.

Hab. in foliis languidis Paxiæ calophyllæ ex Connaraceis
in Camaroes Africæ occid. (Communic. A. MOLLER). — A *Micro-
peltide aeruginosa* differt sporidiis distincte clavatis, 6-septatis, cel-
lulis mediis non crassioribus, peritheciis poro subrotundo pertusis,
etc.; a *M. clavigera* mox dignoscitur sporidiis 6-septatis multo
minoribus, etc.

5. **Micropeltis albo-ostiolata** P. Henn., Hedwigia XLVII (1908) p. 268. 5107
— Peritheciis hypophyllis sparsis, dimidiato-scutellatis, atro-cel-
lulosis, ostiolis pertusis albis, ca. 200-220 μ. diam., hyphis fuscis
2-4 μ. cr., conidiis clavatis, fuscis 3-4-septatis, 40-50 × 3-4; ascis
oblongo-ovoideis v. ellipsoideis, 8-sporis, 25-35 × 10-13, paraphy-
sibus filiformibus, hyalinis, 0,5-1 μ. crassis; sporidiis subdistichis v.
conglobatis, clavatis, 3-septatis, constrictis, grosse guttulatis, 10-
13 × 3-4.

Hab. in foliis Myrtaceæ, Amazonas, Rio-Juruá, Brasilia.

6. **Micropeltis Hirtellæ** P. Henn. Hedwigia XLVII (1908) p. 269. — 5108
Peritheciis gregarie sparsis hypophyllis, dimidiato-scutellatis, atro-
brunneis, reticulato-cellulosis, ostiolatis, margine fibroso-pallidis ca.
200-280 μ. diam.; ascis clavatis, rotundatis, curvulis, 8-sporis, 35-
45 × 13-18; sporidiis substristichis v. conglobatis, subclavatis v. sub-
fusoideis utrinque obtuso-rotundatis, 5-7-septatis, constrictis, hya-
linis, 30-35 × 5.

Hab. in foliis Hirtellæ amazonicæ Aubl., Amazonas, Rio
Juruá, Brasilia.

7. **Micropeltis Caunæ** Speg., An. Mus. Nac. Buenos Aires t. XIX 5109
(1909) p. 428. — Maculis nullis; peritheciis sparsis minutis non
nitentibus, amphigenis, solitariis, orbicularibus 150-200 μ. diam.,
stellatim dehiscentibus, ambitu integris, areola tenuissima hyalina
cinctis; ascis obclavatis tetrasporis, apice crasse tunicatis, basi bre-

vissime noduloseque pedicellatis, 70 × 18-20, a paraphysatis; sporidiis medicocribus clavulatis, 4-septatis 28-30 × 6,5-7.

Hab. ad folia viva Pruni sphærocarpæ prope San Pedro, Misiones, Argentina America austr. — *An M. albo-marginatae* Speg. tantum varietas?

8. *Micropeltis Rechingeri* v. Höhnel, Fragm. z. Mykol., Sitzb. k. Ak. 5110 d. Wiss. Wien, Bd. CXVI, Abt. I (1907) p. 102. — Peritheciis epiphyllis, sparsis, opace brunneo-nigris, depresso-scutellatis ostiolo primum rotundato dein stellato praeditis, breviter tenuiterque hyalino-marginatis, 280-300 μ. diam.; paraphysibus numerosis, filiformibus, mucosis; ascis octosporis, clavatis, sessilibus 32-44 × 10-11; sporidiis distichis v. tristichis, hyalinis, quadrilocularibus, non constrictis, elongatis v. elongato-clavatis, utrinque tenuiter rotundatis, 13-18 × 3-4.

Hab. in foliis ? Spirææ anthemi, Utumapu Samoa (RECHINGER). — *M. leucopteræ* Penz. et Sacc et *M. albo-marginatae* Speg. affinis sed distincta.

9. *Micropeltis biseptata* v. Höhnel, Fragm. Mykol. VIII (1909) in 5111 Sitzb. k. Ak. d. Wiss. Wien, CXVIII, Abt. I, p. 1168. — Peritheciis hypophyllis, sparsis, superficialibus, depresso scutatis, nigris, membranaceis, 120-140 μ. latis, ostiolo rotundato 15-20 μ. lato praeditis, zonula nigro-brunnea 40-60 μ. lata limitata, margine irregulariter radiatim fibrosulis, olivaceo-brunneis; ascis fusoideo-clavatis, supra rotundatis crasseque tunicatis, infra breviter acutatis et subventricosis, octosporis, 30-32 × 6-9, paraphysatis; sporidiis distichis, hyalinis, utrinque rotundatis, elongato-clavatis, supra latioribus, biseptatis, ad septa non constrictis, 7,5-10 × 2-3.

Hab. in foliis vivis Paratropiae sp. in silvis prope Tjibodas in ins. Java. — *M. manaoensi* P. Henn. valde affinis.

10. *Micropeltis longispora* Earle, Bull. of the New York Bot. Gard. 5112 (1904) p. 311. — Epiphylla; peritheciis sparsis, facile secedentibus, obscure brunneis, rugulosis, 300-400 μ. cr., hemisphærico-applanatis, umbilicatis, ostiolo subcollabescente, contextu tenuiter prosenchymatico, fibrillis subicum sterile applanatum 100-200 μ. lat. efformante; ascis ellipsoideis, a paraphysatis, 70-80 × 25-30; sporidiis cylindraceis, saepe curvulis, hyalinis, multiseptatis, granulosis, apice obtusis, 50-70 × 8.

Hab. in foliis vivis Coffea arabicae, Porto Rico (HELLER). — A *M. Tonduzii* Speg. differt sporidiis latioribus, magis septatis, loculis omnibus æqualibus.

11. **Micropeltis Vriesæ** Rehm, Ann. Mycol. V (1907) pag. 531. — 5118
 Peritheciis epiphyllis, dispersis, in centro maculae orbicularis albidoflavidae, ca. 1 mm. diam., tenuissime membranaceis, contextu prosenchymatico e cellulis 8-10 \times 5, radiantibus, dilute flavidulis conflato, singulis sessilibus, semigloboso-dimidiatis, æqualiter contextis, brunneis, poro pertusis, ca. 200 μ . diam.; ascis clavatis, apice rotundatis, 40-45 \times 9, octosporis; sporidiis fusiformibus, rectis, 3-septatis, haud constrictis, hyalinis, 15 \times 2,5, distichis; paraphysibus tenerimis, ramosis, 1 μ . crassis.
Hab. ad folium Vriesæ, Isola St. Catharina Brasiliae (ULE).
 — A japonica *Micropeltide bambusicola* defectu mycelii effusi grisei recedit.
12. **Micropeltis Sirie** Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 380. 5114
 — Peritheciis depressis, lenticularibus, nigris, 160-200 μ . diam. in maculis hypophyllis flavidis gregarie insidentibus, maturis ostiolo circ. 15 pilis peristomaticis rectis, acutis, 30 \times 3-4 circumdato, præditis, junioribus clausis; contextu e cellulis extus superne radiantibus formato, margine acute dentato, ambitu peritheiorum non circulari sed sinuoso; ascis aparaphysatis, clavatis 40-46 \times 10, octosporis; sporidiis hyalinis, elongato-ovoideis, 14-15 \times 2,5-3, pri-mum bilocularibus, dein 3-4-locularibus.
Hab. in foliis Cubebae caninæ, prope Soenkanegara in Preanger, Java.
13. **Micropeltis Molleriana** Saccardo, Fungi aliquot africani, Bol. Soc. Broteriana v. XXI (1904-1905) pag. 6. — 5115
 Peritheciis epiphyllis sparsis, dimidiatis, omnino planis, ambitu subcircularibus, 700-800 μ . diam., facile secedentibus, opace nigris et saepe minute rugulosis, astomis; contextu minute celluloso olivaceo-fuligineo, cellulis 4-4,5 μ . diam., reticulato-seriatis (non radiantibus); peritheciis margine tenuissimo, eroso-fimbriato, hyalino; ascis obovoideis, utrinque rotundatis, sessilibus, 110-120 \times 50-55, paraphysibus intecto-fasciculatis, filiformibus, subhyalinis, 2 μ . cr. obvallatis; sporidiis tritetrastichis, fusoideis, saepe curvulis, 80-86 \times 14-15, utrinque acutiusculis, e dilutissime flavidio hyalinis, 3-septatis, medium interdum constrictulis.
Hab. in foliis languidis Thecacoridis Mannianæ ex Euphorbiaceis, Roça Bom Successo ins. S. Thomé, Junio 1885 (A. MOLLER). — Sporidiis magnis 3-septatis species statim dignoscitur.
14. **Micropeltis exilis** Schulz. in Flora (1877) p. 49. — Perexigua, 5116 gregaria; peritheciis dimidiatis, non sublinearibus nunc semi-orbi-

cularibus v. scutiformibus, subrepandis, matrici non arce adnatis, atris, poro rotundo pertusis, margine pori subelevato; ascis verticalibus aparaphysatis, crasse tunicatis, persistentibus, 5-6-sporis; sporidiis oblongo-subclavatis, triseptatis, nubilosis, hyalinis.

Hab. ad ramulos exsiccatos *Betulae* albæ, Eperies Hungariæ. — *Var. Carpini* Schulz. in Flora 1877, p. 50, t. II, t. 2. — Peritheciis punctiformibus 160 µ. diam., dimidiatis subsemiorbiculäribus, nigris, tuberculosis, membranaceis, cortici arce adhærentibus, poro rotundo v. elliptico apertis; ascis verticalibus, aparaphysatis, firmis, brevissime stipitatis, fere limoniformibus, 6-sporis; sporidiis cylindraceis utrinque rotundatis, 2-4-guttatis, constricto-1-septatis, 17-18 × 4, hyalinis. — In ramulis Carpini *Betuli*, Eperies Hungariæ. — Ubi sporidia didyma maneant vix *Micropeltis*.

15. *Micropeltis bambusina* v. Höhn., Sitzb. k. Ak. d. Wiss. Wien 5117 CXVIII, Abt. I (1909) p. 322. — Peritheciis sparse gregariis, depresso hemisphæricis subdiscoideis, nigris, nitidulis, 200-300 µ. lat., superficialibus, ostiolo rotundato 12-20 µ. lato; contextu tenui minute parenchymatico, opaco; raro 2-4 peritheciis stromatice adnatis; paraphysibus crassis numerosis, ascos superantibus, muco conglutinatis; ascis clavato-fusoideis, supra attenuatis et obtusatis, 65-85 × 10-12, tenuiter tunicatis, apice tantum incrassatis, octosporis, distichis v. tristichis, hyalinis, elongato-fusoideis, plerumque 6- raro 4-5-locularibus, 22-28 × 4-5,5.

Hab. ad culmos *Bambusæ*, Tjibodas in ins. Java. — *Micr. bambusicolæ* P. Henn. affinis sed differt sporidiis usque 4-septatis, majoribus, membrana marginali pallidiori.

16. *Micropeltis Bambusæ* Pat., Bull. Soc. Mycol. de France, XXII 5118 (1906) p. 57. — Mycelio superficiali nullo; peritheciis in soros 1-2 cm. diam. approximatis, dimidiatis, convexis, atris, nitentibus, c. 300 µ. latis, contextu opaco, rigido, distincte radiato, poro centrali pertusis, sèpe umbilicatis; ascis fusoideis, attenuato-stipitatis, 90-110 × 12-14, octosporis; paraphysibus filiformibus, hyalinis, 1 µ. hyacr.; sporidiis oblique subdistichis, fusoideis, utrinque acutis, hyalinis, transverse 5-septatis (rarius 3-septatis), haud constrictis, 22-27 × 5-6.

Hab. in culmis *Bambusæ*, Papeenoo Tahiti, Polynesia.

17. *Micropeltis ? javanica* (Rac.) Sacc. et Trott., *Heterochlamis javanica* Rac. Bull. Acad. Scienc. Crac. (1909) p. 381. — Mycelio hypophyllo, aereo primum radiatim se evolvente, nigro, ramosissimo,

setulis et hyphopodiis destituto; hyphis septatis 4-5 μ . cr. discum substromaticum nigrum laxiusculum efformantibus ad marginem nonnullis liberis et usque ad 80 μ . long.; peritheciis sub disco evolutis, 220 μ . diam. apice ostiolo 8 μ . diam. præditis; paraphysibus paucis filiformibus, brevibus; ascis cylindraceis, clavatis, basi angustatis, apice depresso-rotundatis, 68-75 \times 14-16, octosporis; sporidiis distichis, virguliformibus, clavulatis, rectis v. curvulis, 3-4 septatis, hyalinis (serius forsitan obscure coloratis) levibus, 22-28 \times 4-6.

Hab. in foliis Tetraceræ sp. Buitenzorg Java.

SCUTELLUM Speg. — Syll. II p. 668, IX p. 1068, XVI p. 645.

1. **Scutellum microsporum** Speg., An. Mus. Nac. Buenos Aires t. XIX 5120 (1909) pag. 427, cum icon. — Maculis nullis; peritheciis sparsis arce adnatis coriacellis, convexulis, 200-250 μ . diam., centro stellatim rimosis, ambitu subintegerrimis; ascis obclavatis brevissime minuteque pedicellatis 50 \times 10, octosporis, paraphysibus filiformibus apice leniter incrassatis subcircinatisque commixtis; sporidiis obclavatis, biseptatis, hyalinis, 12 \times 3-4, ad septa non constrictis; an serius fuscis?

Hab. ad folia viva Moyæ ferocis prope Sancelito, Jujuy, Argentina America austr. — Habitu ad lichenes vergens sed gonidia omnino nulla.

ACTINIOPSIS Starb. — Syll. XVI p. 543, XVII p. 871.

1. **Actiniopsis atro-violacea** P. Henn., Hedw. XLVII (1908) p. 269, 5121 — Peritheciis epiphyllis sparsis, scutellatis, atris, ca. 250 μ . diam., ad marginem setulis rigidis, numerosis, subulatis e hyphis atro-violaceis, c. 3 μ . crassis, apice hyalinis laxe conflatis, c. 200-400 \times 15-40; ascis clavatis vel subfusoideis, 8-sporis, 120-140 \times 10-15; paraphysibus copiosis flexuosis filiformibus, hyalinis c. 2 μ . cr.; sporidiis subdi- v. subtristichis fusoideis v. subclavatis, obtusiusculis, hyalinis, 9-11-septatis, constrictis, c. 50 \times 4-5.

Hab. in foliis Tapuræ sp., Iquitos, Peruvia.

2. **Actiniopsis congensis** P. Henn., in Fl. du Bas- et Moy-Congo, 5122 v. II, fasc. II (1907) p. 99. — Peritheciis hypophyllis superficiabilis sparse gregariis, rotundato-subscutellatis, atro-cellulosis, c. 100-130 μ . cr., margine setulis numerosis subulatis, erectis connatis, rigidis, atris, septatis apice obtusis vel acutiusculis usque ad 300-400 \times 4-6 vestitis, basi hyphis repentibus, ramosis, fuscis, 2,5-

4 μ . cr. circumdatis; ascis clavatis vertice obtuso-rotundatis, 4-8-sporis, 60-80 \times 10-14; sporidiis parallelis cylindraceo-clavatis, superne obtusis, inferne subacutiusculis, pluriguttulatis dein 5-7-septatis haud constrictis, hyalino-cyanescentibus, 40-60 \times 3-3,5.

Hab. in foliis *Psophocarpi palustris*, Kisantu Congo, Afr. trop. (VANDERYST).

3. *Actiniopsis separato-setosa* P. Henn., Hedwigia XLVII (1908) 5128 p. 269. — Peritheciis epiphyllis sparsis v. gregariis subscutellatis ad marginem setosis, hyphis fibrosis radiatis circumdatis, conidiis ovoideis v. clavatis, fuscis 1-3-septatis, 20-30 \times 5-8, poro medio pertusis, cellulosis, atro-fuscis, c. 250-280 μ . diam., setulis simpli-cibus, rigidis, atro-fuscis, apice pallido obtusis, ca. 120-250 \times 5-6; ascis clavatis, obtuse rotundatis, 8-sporis, 90-140 \times 20-30; sporidiis parallelis, cylindraceis, utrinque obtusis, interdum, ad basim attenuatis, 20-26-septatis, constrictiusculis, hyalinis 70-100 μ .

Hab. in foliis *Hirtellæ americanæ* AUBL., Amazonas, Ju-ruá-Miry, Brasilia.

ACTINOPELTIS v. Höhnel, Ergeb. Bot. Exp. Südbras., 1901 in Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 17 (Etym. *actin* radius et *peltæ* scutum). — Perithecia superficialia, obturbinate non scutata, membranacea, radiatim cellulosa, ostiolo setulis circumdato. Asci clavati; sporidia multiseptata, hyalina. — A gen. *Micropeltide* peritheciis vertice corona setarum ornatis et convexo-conicis dignoscitur. — Prof. v. Höhnel locat genus inter *Microthyriaceas*, sed perithecio alte convexo et subintegro non parum re-dit. An potius *Sphaeriaceæ*?

1. *Actinopeltis peristomalis* v. Höhnel, l. c. p. 17, taf. I, fig. 3. — 5124 Peritheciis superficialibus, sparsis vel gregariis, nigris, tenuibus, brunneis, membranaceis, subiculo destitutis, crasse lenticularibus, turbinatis, 80-100 μ . lat., 50 μ . alt., supra depresso-conoideis, infra depresso squamiformibus, ceterum rotundato-subangulosis; ostiolo depresso, irregulariter rotundato, 12-16 μ . diam.; pilis brunneis, obtusis, septatis, horizontaliter patentibus usque ad 50 μ . long., 2-2,5 μ . cr., in seriem simplicem circulariter dispositis; paraphysibus indistinctis; ascis crasse clavatis, basi inflatis, supra rotundatis, crasse tunicatis, octosporis; sporidiis di- v. tristichis, hyalini, rectis v. leniter curvulis, cylindraceo-fusoideis, utrinque acutatis, transverse 5-septatis, circ. 20 \times 4.

Hab. in frondibus Filicis cujusdam, Raiz da Serra prope San-

tos, Sao Paulo Brasilia. — Socia *Hyphonectria byssiseda*. Ad hoc novum genus verisimiliter pertinet etiam *Micropeltis Alang-Alang* Racib.

Sect. 5. Hyalodictyæ.

SACCARDINULA Speg. — Syll. IX p. 1071, XIV p. 692, XVI p. 645.

1. **Saccardinula tahitensis** Pat., Bull. Soc. Mycol. Fr. XXII (1906) 5125

p. 55. — Mycelio epiphylo, subpelliculoso, maculas fuscas, suborbiculares, 3-10 mm. diam. efformantibus ex hyphis intricatis, articulis cylindraceis 10-20 \approx 4-6 fumosis composito; peritheciis superficialibus, sparsis, atris, umbilicatis, ostiolo minuto 60 μ . diam. pertusis, membranaceis, contextu e cellulis 10-20 μ . latis, inordinatis; ascis elongatis 80 \approx 25, apice rotundatis deorsum attenuatis, substipitatis, octosporis, aparaphysatis; sporidiis cylindraceo-ellipticoideis, rectis utrinque obtusis, 28-39 \approx 8-10, hyalinis, 3-5-septatis ad septa constrictulis, loculis mediis septo altero longitudinali divisis, primitus tunica mucosa obvolutis dein nudis.

Hab. ad folia viva Coffeæ nec non Psidii, Tahiti Polynesia. — *S. costaricensi* Speg. sed ascis elongatis et sporidiis minus frequenter septatis.

2. **Saccardinula Usteriana** Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV, p. 30, fig. H. — Subiculo nullo v. vix manifesto; peritheciis saepius hypophyllis sparsis v. hinc inde laxe gregariis hemisphaerico-peltatis 100-120 μ . diam., convexulis coriacellis contextu indistincto, centro per etatem stellatim dehiscentibus, margine fimbriatulis atque subiculo tenuissime parcissimoque torulosocelluloso cinctis; ascis antice obtusissime rotundatis crassiusculeque tunicatis postice subrotundato-cuneatis brevissime crasseque pedicellatis 50-60 \approx 20-40, aparaphysatis, octosporis; sporidiis congregatis elliptico-fusoideis utrinque obtusiusculis primo dense cribroso-guttulatis, 35 \approx 10-12, tunica crassissima, 5 μ . cr., mucosa hyalina vestitis dein transverse 7-septatis, ad septa constrictis, praecipue ad medium, loculis septis longitudinalibus 1 vel 2 divisis, 25-28 \approx 8-10, hyalinis.

Hab. ad folia coriacea Coffeæ et Myrtacearum in Horto bot. Sao Paulo, Brasilia (USTERI). — Species vulgata videtur, sporidiis mucoso-vestitis mox dignoscenda.

Sect. 6. Phæodictyæ.

PHÆOSACCARDINULA P. Henn. — Syll. XVII p. 873.

1. **Phæosaccardinula ficicola** P. Henn., Engl. Jahrb. XXXVIII (1905) 5127 pag. 114. — Maculis fuscidulis, effusis; peritheciis superficialibus sparsis, dimidiato-scutellatis, c. 200-300 μ . diam, contextu atroceruleis v. fuscis, radiato-cellulosis, hyphis radiantibus ramosis, septatis, hyalinis v. fuscis, 2-3,5 μ . circumdati; ascis ovoideis v. clavatis, vertice obtusis, subtunicatis, octosporis, 40-55 \times 18-30, paraphysibus sparsis, filiformibus, flexuosis, hyalinis; sporidiis conglobatis, oblonge clavatis, rectis v. subcurvulis, obtusis, 7-8-septatis, muralibus, primo hyalinis dein fuscis, cellulis constrictis, 20-30 \times 6-9.

Hab. in foliis Fici sp. Amani, Usambara orient. Africæ centr. (ZIMMERMANN).

Sect. 7. Scolecosporæ.

SCOLECOPELTIS Speg. — Syll. IX p. 1072, XIV p. 646, XVII p. 874.

1. **Scolecopeltis dissimilis** Rehm in Theissen, Ann. Mycol. (1910) 5128 p. 462, cum icon. — Peritheciis hypophyllis, sparsis, rotundato-scutellatis, atris, 200-270 μ . diam., medio collapsis, ambitu annulo fusco-lanoso cinctis, contextu non radiato; ascis late elliptico-saccatis, pedicello brevi contracto, supra late rotundatis, 75-85 \times 42-45; sporidiis in asco parallelis, longitudine fere asci, 55-75 \times 6 $\frac{1}{2}$, hyalinis, rectis v. leniter curvis, 10-15-septatis, non v. vix constrictis (articulis secedentibus?).

Hab. in foliis in Brasilia. (Indicatio matrix et loci l. c. desideratur!).

2. **Scolecopeltis trivialis** Raciborski, Bull. Ac. Sc. Cracovie (1909) 5129 p. 381. — Peritheciis nigro-carbonaceis, semilenticularibus, nitidis in hypophyllo irregulariter sparsis, ostiolo apicali præditis, 0,6-1 mm. latis; paraphysibus filiformibus, numerosissimis; ascis elongato-cylindraceis, apice rotundatis, sëpè depresso incurvatis, 140-165 \times 12, octosporis; sporidiis junioribus fusoideis, distichis, medio profunde constrictis, demum in loculos binos secedentibus; loculis singulis subclavatis, hyalinis, 16-21 \times 6, in eodem asco demum 2-3 transverse septatis.

Hab. epiphytice in *Trenteophlia* ad folia arborum variarum,
Buitenzorg, Depok, Tjampea, Tjibodas in ins. Java.

Subgen. *Scolecopeltopsis* v. Höhn. — Perithecia superne circumcircata ala membranacea cincta.

3. *Scolecopeltis transiens* (v. Hohn.) Sacc. et Trott, *Scolecopeltopsis* 5180
transiens v. Höhn., Fragm. zur Mykol. (1909) VIII in Sitzb. k.
Ak. d. Wiss. Wien CXVIII, Abt. I, p. 1186. — Peritheciis hypophyllis, sparsis, nigris, nitidulis obscure cyaneo leniter tinctis, tenuissime albo-marginatis, depresso scutatis, in sicco rugosulis usque ad 600 μ . latis, supra carbonaceo contextis insra tenuiter hyalino contextis, ostiolo subrotundo 8-10 μ . lato margine in alam membranaceam 200 μ . latam sensim tenuiore cyaneo-atram ambituque hyalinam abeunte; ascis numerosis sessilibus fusoideo-clavatis apice tenui tunicatis basi in cuneatis pseudoparaphysatis octosporis; sporidiis di-tristichis primitus oblongo-clavatis deinde cylindraceis hyalinis utrinque rotundatis v. acutulis tandem 6-8-cellularibus constrictisque 40 \times 6, facile in articulos secedentibus.

Hab. in pagina inf. foliorum vivorum Paratropiæ spec. in silvis prope Tjibodas in ins. Java (v. HÖHNEL) et in foliis Payennæ sp. Depok Java (RACIBORSKI). — Ad hoc subgenus quoque *Scolecopeltopsis aeruginea* (Zimm.) v. Höhn., Fragm. Mykol. VI n. 218, p. 42, *Scolecopeltis aeruginea* Zimm. — Syll. XVII, p. 874.

Subfam. 2. Asterineæ.

Sect. 1. Hyalosporæ.

ASTERULA Sacc. — Syll. I p. 47, IX p. 375, XI p. 254, XIV p. 692, XVI p. 646.

1. *Asterula* Bruinsma! Koord., Botan. Untersuch. (1907) pag. 171, 5181 fig. 10 et taf. XII, fig. 17. — Peritheciis subdiaphanis, atris, sparsis, in mycelio atro subsuperficiali insidentibus, appланato-lenticularibus, 90-110 μ . diam., ostiolo circulari instructis; ascis clavatis; apice rotundatis, octosporis, 20-25 \times 9-10; sporidiis continua, hyalinis, fusiformibus, utrinque obtusis v. rotundatis, rectis, 10-13 \times 3,25-3,50, biseriatis; paraphysibus nullis.

Hab. in foliis *emortuis Fici elasticæ prope Penunggalan*
prov. Kedu ins. Java (KOOEDERS).

Sect. 2. Hyalodidymæ.

ASTERELLA Sacc. — Syll. I p. 42, IX p. 393, XI p. 256, XIV
p. 698, XVI p. 649, XVII p. 882.

1. **Asterella Rubi** (Fuck.) v. Höhn, Ann. Mycol. (1905) pag. 326, 5132
Actinonema Rubi Fuck., *Asteroma Rubi* (Fuck.) Sacc. — Syll. III,
p. 202. — Peritheciis subrotundis, scutatis, 160 μ . diam., mem-
branaceis e cellulæ inordinate dispositis, brevibus, irregulariter si-
nuosis efformatis, olivaceo-brunneis, in subiculo matrici arcte adnato
maculiformi tenui-membranaceo superficialibus; subiculi hyphis
brunneis, rigidulis, 3-4 μ . cr., reticulatim connexis cellulisque pa-
renchymaticis interpositis; ascis 8-15 pluribusve, oblongo-ovoideis,
octosporis, brevissime stipitatis, 24-28 \times 8-12; sporidiis 2-3-seriatis,
bicellularibus, hyalinis, 9-12 \times 3-4, ad septum non constrictis, cel-
lula superiore breviore et latiore; paraphysibus, brevibus, nodu-
losis, curvis.

Hab. in ramentis vivis Rubi idæi in Helvetia (MORTIER),
Austria (v. HÖHNEL). — Var. *rholma* v. Höhn., l. c. — A typo
maculis obsoletis, peritheciis et ascis paullo minoribus differt. —
In ramulis vivis Rhois Cotini in Wiener Wald Austriae (v.
HÖHNEL).

2. **Asterella multiplex** (Rehm) Sacc. et Trott., *Asterina multiplex* 5133
Rehm, Ascom. exsicc. n. 1706, (1907) et Ann. Mycol. V (1907)
p. 209. — Peritheciis in maculis epiphyllis orbicularibus, in am-
bitu subfibrillosis nigris, 3-4 mm. latis, sèpè confluentibus grega-
rie sessilibus, globulosis, parenchymatice centrifuge contextis, ra-
diatim ad basim in hyphis mycelii septatis, subfuscis, 4-5 μ . cr.,
sessilibus, glabris, fusco-nigris, in apice demum stellatim apertis,
senilibus rugulosis; hyphopodiis mycelii perraris, alternantibus,
lobulatis, parvulis, setulis erectis subcurvatis, apice subobtusis, sub-
fuscis, c. 150 \times 8-9 ad basim peritheciis sessilibus; ascis ovoideis,
crasse tunicatis, 50-60 \times 45-50, octosporis; sporidiis ovoideis medio
septatis et constrictis, hyalinis, 20-25 \times 10-12; paraphysibus ra-
mosis 2-3 μ . cr.

Hab. in pagina sup. foliorum *Styracis*, Sao Leopoldo Rio
Grande do Sul, Brasilia (Prof. J. RICK).

3. *Asterella Missionum* Speg., An. Mus. Nac. Buenos Aires t. XIX 5184 (1909) p. 428. — Plagulis orbicularibus, sæpius epiphyllis 3-5 mm. diam., atris, subpelliculosis, glabris; perithecii prosenchymaticis suborbicularibus 120-150 μ . diam., dimidiato-scutatis, astomis, atris, opacis; ascis ellipsoideis utrinque rotundatis apice crasse tunicatis, basi crasse breveque umbonato-pedicellatis 70-80 \times 30-35, octosporis, pseudoparaphysatis; sporidiis subclavulatis didymis, 40 μ . long. loculis inæqualibus, supero 18 \times 15-16, infero 22 \times 12, hyalinis, conglobatis.

Hab. ad folia viva Pruni, Symploci nec non Ilicis, in silvis prope Campina de Americo, Misiones, Argentina, America austr.

4. *Asterella Erithalidis* Ell. et Ev. in Millsp. Publ. Field Columb. Mus. Bot. II n. 1 (1900) p. 15, t. 50. — Hypophylla; mycelio laxo paginam sup. foliorum occupante, sed maculas vix formante; filamentis reticulato-ramosis; hyphopodiis capitatis obovatis, 15-20 \times 5; hyphopodiis mucronatis elongato-conicis, 12-15 \times 5-6; setis e mycelio orientibus, 150-250 \times 5; perithecii globoso-membranaceis, subastomis, 80-100 μ . diam.; ascis oblongis, 20-30 \times 8-10; sporidiis subdistichis, oblongis, 1-septatis, hyalinis, vix constrictis, 6-8 \times 3-5.

Hab. in foliis Erithalidis angustifoliæ in insula Grand Cayman Antillarum.

5. *Asterella virescens* (Spegazz.) Sacc. et Trott., *Asterina virescens* 5186 Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV, p. 28. — Perithecii epiphyllis, astomis radiatim dehiscentibus, margine vix repandulis, 200-220 μ . cr., contextu minutissime parenchymatico radiante olivaceo subopaco, areola hypothallina latiuscula oculo nudo sordide albescente, sub lente e cellulis cuboideis seriatim radiantibus grosse 1-guttulatis constitutis, cinctis; ascis subcylindraceis antice obtusissime rotundatis, parum infra medium leniter incrassatulis, postice cuneatis breviuscule pedicellatis, 80 \times 10, paraphysibus filiformibus vix longioribus apice minute incrassatulis, obvallatis, octosporis jodi, ope nulla; sporidiis oblique distichis utrinque obtusiusculis 16-20 \times 4, medio 1-septato-constrictis, loculis diblastis, hyalinis.

Hab. ad folia viva Bignoniacæ cujusdam, Ipiranga Cambucy Brasilia (USTERI). — Species sat dubiusa hypothallo lichenino sed gonidia non visa.

6. *Asterella olivacea* v. Höhn. in Rehm, Ann. Myc. III (1905) p. 326 5187

et Ascom. exsicc. n. 1623. — Peritheciis sparsis, tenui-membranaceis, 150-190 μ ., depresso scutatis, olivaceo-virentibus, astomis, contextu parenchymatico, sed non radiato, cellulis 2-4 μ . diam., margine primitus tenuiter hyalino-fimbriatis; ascis globoso-ovoideis, 25 \times 12-18, sursum crasse tunicatis, octosporis, aparaphysatis; sporidiis oblongis, utrinque rotundatis, tenui-tunicatis, hyalinis, medio leviter constrictis septatisque, 9-12 \times 4-5, interdum articulis secedentibus.

Hab. in foliis adhuc viridibus Buxi sempervirentis intra Speluncam pr. Erisa in ins. Corsica (v. HÖHNEL). — Ob subiculi defectum, potius est *Microthyri* sp., sed contextus peritheci, teste v. Höhnel, *Asterellæ*. An recte hujus loci?

7. *Asterella tenuissima* (Petch) Sacc. et Trott., *Asterina tenuissima* 5188
Petch, Ann. Roy. Bot. Gard. Peradenya III (1906) Pt. I, p. 1. —
Tenuissima late effusa, maculam nebulosam in ramulis et fructibus formans; hyphis repentibus brunneis, 4-5 μ . diam., glabris, in stratum mucosum deinde junctis, multas erectas, septatas, olivaceas, acutas hyphas, 90-100 μ . gerentibus; peritheciis applanatis, nigris, 130-160 μ . diam., ostiolatis; ascis clavatis, 30-40 \times 9-12; sporidiis uniseptatis, constrictis, hyalinis, fusoideis, 13 \times 4.

Hab. in ramulis vivis fructibusque Heveæ brasiliensis Ceylon. — An *Aster. nubecula* B. et Br.?

8. *Asterella aliena* (Ell. et Ev.) Sacc. et Trott., *Asterina aliena* Ell. 5189
et Gallow. in Ell. et Ev., North Amer. Pyr. (1892) p. 36. — Mycelio crustaceo maculas subellipticas 0,5-1 \times 0,2-0,5 cm. brunneo-marginatas distincte limitatas efformante; peritheciis amphigenis, lenticularibus, subconfluentibus, 150-200 μ . diam., celluloso-fibrosis et margine reticulato-fimbriato præditis; ascis primum ovoideis, demum subelongatis 50-60 \times 20, breviter stipitatis, octosporis; sporidiis inordinatis, obovoideis, granulosis, hyalinis (dein uniseptatis?) 13-15 \times 4-5.

Hab. in foliis Ananassæ sativæ cultæ, Washington D. C.
Americæ bor.

Sect. 3. Phæodidymæ.

ASTERINA Lév. — Syll. I p. 39, IX p. 379, XI p. 255, XIV p. 693,
XVI p. 646, 1141, XVII p. 875.

1. *Asterina Derridis* P. Henn., Hedwigia XLVII (1908) p. 260. — 5140

Peritheciis hypophyllis gregariis in maculis atris effusis, dimidiato-scutellatis, radiato-cellulosis, brunneis, poro pertusis 70-90 μ ., hyphis radiatis, ramosis, septatis, fusco-brunneis, 3-3,5 μ . circumdatis; ascis ellipsoideis v. ovoideis, vertice tunicatis, 8-sporis, 20-30 \times 20-25; sporidiis congregatis ovoideis v. ellipsoideis, 1-septatis, constrictis, hyalinis deinde fuscidulis granulatis, 11-16 \times 6-8.

Hab. in foliis Derridis uliginosæ, Mindanao, Davao ins. Philippin. (COPELAND).

2. **Asterina Combreti** Syd., Engler's Bot. Jahrb. 45. Bd. (1910) p. 264. 5141

— Maculis mycelii plerumque epiphyllis, rotundatis v. effusis, 2-4 mm. diam.; mycelio ex hyphis repentibus varie ramosis anastomantibus parce septatis 3,5-4,5 μ . cr., hyphopodia alternantia, 1-septata, brevi-stipitata, c. 8-10 μ . longa, 4-5 μ . cr. gerentibus composito; peritheciis gregariis, punctiformibus, atris, amœne radiatim contextis, stellatim dehiscentibus, 90-175 μ . diam.; ascis globosis, subglobosis v. ovatis, 28-40 \times 28-32, octosporis, a paraphysatis; sporidiis congregatis, oblongis, utrinque rotundatis, medio 1-septatis et constrictis, primo hyalinis dein brunneis, 14-19 \times 8-11; pycnidii ad genus *Asterostomellam* pertinentibus, eadem forma et structura ut perithecia sed paullo minoribus; sporulis ellipsoideis v. piriformibus, continuis, brunneis, 18-21 \times 10-13.

Hab. in foliis Combreti tavetensis, Kibwezi Africa trop. britannica (SCHEFFLER).

3. **Asterina Sidæ** Earle, Bull. N. York Bot. Gard. III (1904) p. 310. 5142

— Plerumque epiphylla, maculas indefinitas, tenues, nigricantes 2-4 mm. diam. efformante; mycelio angusto, e filamentis zig zag formiter radiantibus 4 μ . cr. constituto; hyphopodiis sessilibus, irregulariter et conspicue 3- v. 4-lobatis, 7-8 μ .; peritheciis numerosis, sparsis, 80-100 μ . diam., convexo-applanatis, ex hyphis obscuris, opacis, fortiter conglutinatis radiantibus, subostiolatis, lacerato-stellatis; ascis subglobosis, octosporis, 20-25 μ . diam.; sporidiis inordinatis, ovoideis subinæqualiter uniseptatis, fortiter constrictis, fuligineis, 14 \times 8.

Hab. in foliis vivis Sidæ carpinifoliæ, Jamaica (EARLE), Porto Rico (HELLES).

4. **Asterina Balansæ** (Speg.) Sacc. et Trott., *Seynesia Balansæ* Speg. 5143

— Syll. IX, p. 1065 — var. *macrocarpa* Speg., Fungi Paulist., Rev. Mus. La Plata t. XV, p. 28 (*Asterella*). — A typo recedit ascis majoribus angustioribusque, 50-60 \times 20-25; sporidiis elliptico-obovatis 20 \times 10, loculis subæquilongis, supero ovato obtuso, infero

conoideo acuto, primo hyalinis dein plus minusve intense fuligineis.

Hab. ad folia Melastomataceæ cujusdam prope Ipiranga Brasiliæ (USTERI).

5. *Asterina Mate* Speg., Ann. Mus. Nac. Buenos Aires t. XVII (1908) 5144 p. 130, XIX (1909) pag. 428, cum icon. — Subiculo parcissimo, plagulas tenuissimas orbiculares 3-7 mm. diam., saepius hypophyllas subnubilosas fuscas constitutæ; peritheciis laxe gregariis grosse parenchymatico-cellulosis, latissime fimbriato-ostiolatis, 100 μ . diam.; ascis subglobosis, 3-8 in quoque perithecio, superne rotundatis crasseque tunicatis basi subcuneatis brevissime pedicellatis 50-70 \times 40-50, octosporis, aparaphysatis; sporidiis conglobatis cylindraceis utrinque rotundatis, 38-40 \times 16-18 ad septum constrictis, grosse 1-guttulatis, primo hyalinis dein fuligineis.

Hab. ad folia viva Ilicis paraguariensis prope San Pedro, Misiones, Argentina Austr.

6. *Asterina echinospora* v. Höhn., Fragm. z. Mykol., X (1910) in 5145 Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 440. — Plagulis nigris, 2-3 mm. latis, rotundatis, bene limitatis, sparsis, epiphyllis; subiculo arete adnato, tenui, ex hyphis brunneis 4-6 μ . lat. laxe ramoso-reticulatis constituto; hyphopodii unilocularibus elongatis, 10 \times 4-5; peritheciis cæspitosis, fortiter convexis medio saepè umbilicatis, nigris, subcircularibus, 150-240 μ . latis; paraphysibus nullis; ascis ovoideis, basi acutatis, extus leniter mucosis, octosporis, 44-48 \times 36; sporidiis brunneis, bilocularibus, crebre hyalino-aculeolatis, utrinque rotundatis, loculo inferiori angustiore, ad septum constrictis, 26-29 \times 12-14.

Hab. in foliis Cansjeræ Rheedii, Ceylon (THWAITES). — *Asterinae Loranthacearum* Rehm præcipue affinis.

7. *Asterina crustacea* (Ell. et Ev.) Sacc. et Trott., *Asterella crustacea* Ell. et Ev. in Millspaugh, Publ. Field Columb. Mus. Bot. II (1900) n. 1, p. 15, t. 51. — Epiphylla; mycelio suberustoso, maculas orbiculares nigras 2-3 mm. diam., formante, ramoso-reticulato, sine hyphopodiis et setis; peritheciis lenticularibus, tenuibus, applanatis, 0,5 mm. diam., ostiolo papillato, subinde compresso; ascis clavato-oblongis, subsessilibus, 70-80 \times 15-20; sporidiis obpiriformibus 1-septatis, initio hyalinis et strato hyalino obvolutis demum brunneis, constricto-1-septatis, cellula superiore elliptica et latiore, inferiore obconica.

Hab. in foliis Psidii Guajava in insula Grand Cayman Antillarum.

8. *Asterina leopoldina* Rehm, Ann. Mycol. V (1907) p. 521. — My. 5147
celio hypophyllo, plagas orbiculares, demum confluentes, 2 cm.
lat., formante, arachnoideo, nigrescente, ex hyphis centrifugis, re-
ctangulariter ramosis, undulatis, subfuscis, septatis, 4-5 μ . lat.,
tenuissimis formato, hyphopodiis singulis, lobulatis, 9 μ . lat. et alt.,
simplicibus obpresso; peritheciis in centro macularum mycelii disper-
sis, semiglobosis, ad marginem centrifuge dendriticis, fuscidulis,
glabris, poro demum stellatim expanso, 180-300 μ . diam.; ascis
clavatis, apice crasse tunicatis, 80 \times 30, octosporis; sporidiis clava-
tis, 2-cellularibus, cellula superiore latiore, medio subconstrictis,
hyalinis, dein fuscidulis, 25-30 \times 10-12; paraphysibus 4 μ . cr. se-
ptatis conglutinatis.

Hab. ad folia Myrtaceæ, Sao Leopoldo, Rio grande do Sul,
Brasilia (RIO S. J.).

9. *Asterina dispar* Speg. — Syll. IX, p. 384 — var. *paraphysata* 5148
Speg., Fungi Paulist., Rev. Mus. La Plata t. XV, p. 27. — Ascis
obovatis, 60-80 \times 30-40, paraphysibus submucosis obvallatis, spor-
rum loculo supero sphærico 16 \times 16, infero conoideo 12 \times 10, acu-
tiusculo, adhuc hyalinis visis.

Hab. ad folia viva Myrtaceæ cujusdam in hortis Sao Paulo
Brasilia (USTERI).

10. *Asterina typhospora* R. Maire, Ann. Mycol. VI (1908) p. 148, 5149
fig. 4. — Mycelio epiphylio, plaga atras, orbiculares v. ellipticas,
sepe confluentes, 2-5 mm. diam., efformante, arachnoideo; hyphis
brunneis, 5-6 μ . diam., rectis, vel rarius flexuosis, plus minusve
rectangulariter ramosis et anastomosantibus, septatis; hyphopodiis
perraris, globosis, unicellularibus, sessilibus, 6 μ . diam.; haustoriis
dendroideis, intra cellulas hypodermatis ramosis; peritheciis scu-
tatis, atris, glabris, ostiolo centrali circulari pertusis, contextu pro-
senchymatico radiante, margine hyphis contortis fimbriatis; ascis
octosporis clavatis, apice crassius tunicatis, 90-105 \times 28-30; spori-
diis 36-40 \times 16-18, clavatis v. obovato-clavatis, levibus, ex hyalino
fuligineo-brunneis, uniseptatis, cellula superiore globosa v. subglo-
bosa, latiore, cellula inferiore angustiore, cylindracea v. clavata, re-
cta v. curvula, longitudine cellulam superiore æquante v. paul-
lum superante; paraphysibus conglutinatis parum evidentibus.

Hab. in foliis vivis Myrtaceæ cujusdam, Mandagui prope
Sao Paulo, Brasilia.

11. *Asterina ? megalosperma* Speg., Fungi Paulist., Rev. Mus. La 5150

Plata t. XV, p. 27. — Maculis nullis; peritheciis hinc inde laxe gregariis astomis, 250 μ . cr., scutatis centro radiato-fimbriatis dehiscentibus, subiculo nullo v. parcissimo cinctis, contextu subindistincto brevissime prosenchymatico; ascis paucis substantia mucoso-parenchymatica hyalina comitatis, antice obtusissime rotundatis, postice breviter cuneatis, pedicello parvulo nodulosoque suffultis 60-70 \times 40-50, crasse tunicatis, octosporis; sporidiis congregatis rectis v. curvulis utrinque subacutato-rotundatis, 35-40 \times 11-15 levibus, loculis facillime secedentibus, hyalinis (an demum fuligineis?).

Hab. ad folia coriacea Myrtacearum quarumdam circa Ipiranga Brasilia (USTERI).

12. *Asterina pontica* Bub. in Handel-Mazzetti Bot. Reis. Pont. Ren- 5151

dyeb. in Ann. Naturhist. Hofmus. Wien (1909) XXIII, p. 102, t. V, f. 1 a-f. — Peritheciis ramicolis, diffusis v. aggregatis, initio subepidermicis, dein nudis, rotundatis, v. irregulariter rotundatis, planis, discoideis, nigris, opacis, centro paulum concavis, hinc poro brevi, conico apertis, contextu radiato, castaneo-brunneo, 200-400 μ . lat.; ascis oblongis, 30-45 \times 22-25, ad apicem valde attenuatis flexuosisque, octosporis; sporidiis oblongis, 12-15 \times 4-4,5, medio uniseptatis, loculo inferiore paulo crassiore, utrinque attenuatis, subdistichis, olivaceo-brunneis.

Hab. in ramis Daphnes ponticae var. Szowitzii et D. glomeratae in montibus ponticis Anatoliæ.

13. *Asterina Loranthacearum* Rehm, Ann. Mycol. V (1907) p. 522. 5152

— Maculis hypo- et epiphylliis, orbicularibus, nigratulis, tenuissimis, 3-5 mm. diam.; peritheciis globulosis, in medio maculae creberrime sessilibus, poro pertusis, glabris, tenuiter parenchymatico-contextis, fusco-nigris, 70-100 μ . diam., demum stellatum apertis, in mycelio hypharum paucarum fuscarum septatarum, 4-5 μ . latarum, hypopodia alternantia oblonga 7-10 \times 4-5, interdum bicellularias gerentium sessilibus; ascis ovalibus crasse tunicatis, 30 \times 20, octosporis; sporidiis clavatis, 2-cellularibus, medio subconstrictis, demum subfuscis et scabriusculis, 20 \times 10; conidiis ellipsoideis, subfuscis, 3-septatis, 18-20 \times 5-6.

Hab. in foliis Loranthaceæ, Sao Leopoldo, Rio Grande do Sul, Brasilia (RICK S. J.). — Perithecia ægre conspicua.

14. *Asterina Strophanthi* P. Henn., Engl. Jahrb. XXXVIII (1905) 5153

p. 125. — Maculis subfuscidulis; peritheciis epiphyllis gregariis

lenticularibus, atro-castaneis, radiato-cellulosis, 70-120 μ . diam., margine pallidiori, hyphis repentibus, ramosis, septatis, atro-fuscis, 2,5-3,5 μ . cr., conidiis ovoideis, basi apiculatis, atro-brunneis 18-22 \times 10-13; ascis ellipsoideis v. ovoideis, vertice tunicatis, 8-sporis, 25-38 \times 18-22; sporidiis conglobatis ovoideis, primo hyalinis, medio 1-septatis, valde constrictis, 13-16 \times 7-8, atro-brunneis.

Hab. in foliis *Strophanti hispidi*, Lome Togo Africæ centr. (WARNECKE). — Status conidiophorus: cfr. *Asterostomella Strophanthi*.

16. **Asterina kwangensis** P. Henn., in Fl. du Bas- et Moy.-Congo, 5154 Ann. Mus. du Congo v. II, fasc. II (1907) p. 99. — Peritheciis dense gregariis plerumque epiphyllis, lenticularibus v. subdiscoideis, atris, contextu radiato-fibrilloso, centro pellucido, radiato-lobato-dehiscentibus c. 90-120 μ . diam., hyphis radiantibus, ramosis, atro-fuscis, c. 3-4 μ . cr. circumdatis, pseudopodiis ovoideis, murali-divisis 10-12 \times 5-8; ascis ovoideis rotundato-obtusis subtunicatis 8-sporis, 18-25 \times 15-20; sporidiis conglobatis ellipsoideis, medio valde constrictis, atro-castaneis, 12-15 \times 5-7.

Hab. in foliis Asclepiadaceæ cujusdam, Kisantu Congo, Afr. trop. et in foliis Malvaceæ, Boko Sainte-Barbe Congo, (VANDERYST).

16. **Asterina triloba** Earle, Bull. New York Bot. Gard. III (1904) 5155 p. 310. — Epiphylla, maculas nigras 2-4 mm. diam. sœpe confluentes efformante; mycelio subangusto, ex filis fuscis, 4 μ . circ. cr., hyphopodiis sparsis, sessilibus, irregularibus, sed plerumque trilobatis, 7-8 μ . circ. cr.; peritheciis copiosis, scutatis, ex fibrillis radiantibus, nonnullis marginem excedentibus et subiculum *Lembosiae* simile efformantibus, 30-50 μ . lat., stellatim disruppentibus 90-120 μ . diam.; ascis e late ovoideis suborbicularibus, circ. 25-30 μ ; sporidiis maturis hyalinis dein obscure brunneis; subæqualiter uniseptatis, constrictis, ellipsoideis, apice obtusis, circ. 20-25 \times 8-9.

Hab. in foliis vivis *Crotonis discoloris*, Limestone Hills, Porto Rico (HELLE). — *Ast. crotonicola* Pat. similis sed hyphopodiis trilobis, sporidiis minoribus diversa.

17. **Asterina Usterii** R. Maire, Ann. Mycol. VI (1908) p. 146, fig. 3, 5156 tab. I, fig. 2. — Mycelio epiphylo, plagas atras, orbiculares vel ellipticas, sœpe confluentes. 2-5 mm. diam., efformante, arachnoido-reticulato; hyphis fuscis, 3-5 μ . diam., rectis vel rarius flexuosis, rectangulariter ramosis et anastomosantibus, septatis; hyphopodiis numerosis, alternis, globosis v. subglobosis, unicellularibus,

sessilibus, alternantibus, 4-5 μ . diam.; haustoriis in cellulis epidermatis, rarius hypodermatis dense ramosis, ramis conglobatis; peritheciis scutatis, aterrimis, subcarbonaceis, glabris, ostiolo centrali circulari pertusis vel subastomis, irregulariter dehiscentibus; contextu prosenchymatico radiante, margine hyphis rectis fimbriatis; ascis octosporis ovoideis vel ellipsoideo-oblongis, 33-40 \times 13-23, apice crassius tunicatis; sporidiis distichis vel conglobatis, 15-21 \times 6-10, clavatis vel obovato-clavatis, medio septatis et valde constrictis, levibus vel minutissime rugulosis, ex hyalino fuligineo-brunneis; cellula superiore subglobosa v. breviter ellipsoidea, inferiore subæquilonga, angustiore, ovoidea v. ovoideo-ellipsoidea; paraphysibus, tenuibus, septatis, simplicibus vel breviter ramulosis, conglutinatis.

Hab. in foliis vivis Euphorbiaceæ cujusdam (an Pseudotrophis?), Alto da Serra prope São Paulo, Brasilia.

18. *Asterina Coccolobæ* Ferd. et Winge, Botanisk Tidsskrift XXIX 5157 (1908) p. 10, tab. I, fig. 2. — Maculis nullis; peritheciis in greges orbiculares, 1-2 mm. diam., dispositis, epiphyllis, atris, applanato-scutatis, structura distincte radiata, margine crenulato-fimbriato, ambitu irregulariter ellipticis v. subrotundis, circ. 175-350 μ . d., hyphis brunneis, septatis, saepe anastomosantibus, 4,5-6,5 cr., hyphopodia semiglobosa 9-12 \times 6-8 gerentibus, cinctis; ascis late ellipsoideis ovoideisve, nonnumquam subglobosis, sessilibus, 38-50 \times 25-37; sporidiis octonis, conglobatis, cylindraceo-oblongis, utrinque subtruncatis vel late rotundatis, crasse tunicatis, 1-septatis, ad septum constrictis, 20-25 \times 8-11, juvenilibus flavidulis, maturis brunneis.

Hab. ad folia viva Coccolobæ uviferæ in insula St. Croix India occ. (RAUNKIAER).

19. *Asterina consimilis* v. Höhn. Fragm. Mykol. VII (1909) in Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, pag. 862. — Peritheciis nigro-opacis, scutellatis 200-250 μ . diam. in plagulis nigricantibus tenuibus usque ad 10 mm. latis insidentibus et regulariter sparisis; contextu peritheciis opaco, ex hyphis 4-6 μ . latis radiatim dispositis constituto; ostiolo irregulariter radiatim laciniato; margine peritheciis tenuiori irregulariter laciniato-lobulato; paraphysibus irregulariter ramosis supra brunneolis; ascis ovoideis, superne tunica fortiter incrassata, sessilibus, 4-8-sporis, 45-50 \times 24-25; sporidiis ovoideo-clavatis, bilocularibus, utrinque rotundatis, ad septum vix constrictis, 27-28 \times 13; loculo superiori paullo breviori et latiori,

contentu homogeneo; sporidiis diu hyalinis, maturis obscure brunneis; ascis Jodi ope flavidis.

Hab. in foliis arborum in Horto bot. Buitenzorg in ins. Java.

— *Ast. quartae* Rac. affinis.

20. *Asterina valida* (Speg.) Sacc. et Trott., *Asterella valida* Spegazz., 5159

Fungi Paulist., Rev. Museo La Plata t. XV, p. 29. — Plagulis subiculi orbicularibus 3-8 mm. diam., arachnoideis matrici arctiuse scule adnatis, atro-fumosis, ex hyphis 5-7 μ . cr., septulatis flexuosis, hyphopodiis destitutis, efformatis; peritheciis in centro plagularum plus minusve gregariis, dimidiatis 150-220 μ . diam., stellatim dehiscentibus, margine fimbriatulis membranaceis, contextu dense parenchymatico radiante subpellucido donatis; ascis antice obtusissimis crasseque tunicatis postice rotundato-cuneatis, brevissime minuteque pedicellatis e nodulo centrali subparenchymatico chlorino exsurgentibus, 70 \times 60, octosporis, tunica per æstatem fuscescente; sporidiis conglobatis medio validiusculis constrictis utrinque obtusiusculis 20-30 \times 12, uni-septatis loculis subisomorphis, primo hyalinis dein fuligineis.

Hab. ad folia coriacea arbusculæ ignotæ cujusdam, Ipiranga até Moça, Brasilia (USTERI).

Subgen. *Clypeolella* v. Höhn. — Perithecia astoma.

21. *Asterina inversa* (v. Höhn.) Sacc. et Trott., *Clypeolella inversa* 5160

v. Höhn., Fragm. z. Mykol. X (1910) in Sitzb. k. Ak. d. Wiss. Wien, CXIX, Abt. I, p. 403. — Subiculo griseo-cinereo, rotundato, 5-10 mm. lato, saepe plagulas tenues confluendo latas efformante; hyphis violaceo-brunneis ramosis, arcte adnatis, 6-7 μ . latis, 16-32-articulatis, hyphopodiis unilocularibus, globosis, 9-10 μ . lat., præditis; peritheciis in subiculo sparsis, opacis, margine lobulatis, pariete tenui medio parenchymatico brunneo demum disrupto; ostiolo nullo; paraphysibus atypicis filiformibus, cellulari articulatis 5-6 μ . lat.; ascis numerosis, crasse tunicatis, ex ovoideo-piriformibus subglobosis, octosporis, 50-65 \times 35-40, J. +; sporidiis hyalinis conglobatis, elongato-ovoideis, utrinque rotundatis, subtenueri tunicatis, strato mucoso tenui cinctis, supra latioribus, bilocularibus, ad septum non constrictis plasmate subhomogeneofarctis, 22-24 \times 10; conidiis in mycelio sparsis, trilocularibus, superne rotundatis, basi acutatis, 28-36 \times 13-15; loculis binis superioribus brunneis, inferiore hyalino.

Hab. in pagina superiore foliorum coriaceorum leviorum serratum viventium arboris cuiusdam, São Leopoldo Rio Grande do Sul Brasiliæ (THEISSEN). — Cum *Ast. silvatica* Speg., *Ast. Sapotacearum* Speg., *Ast. laxa* Wint. comparanda.

CHÆTASTERINA Bubák in Handel-Mazzetti Bot. Reis. Pontisch.

Randgeb. in Ann. Naturhist. Hofmus. 1909, Wien XXIII, p. 102 (Etym. *chæte* seta et *Asterina*). — A typo gen. *Asterina* recedit peritheciis ipsis copiose setigeris.

1. **Chætasterina anomala** (Cooke et Harkn.) Bub. l. c. *Asterina anomala* Cooke et Harkn. — Syll. I, pag. 49. — In foliis Pruni Laurocerasi in California et in mont. Ponticis.

MYXASTERINA v. Höhn, Fragm. Mykol. VII (1909) in Sitzb. k.

Ak. d. Wiss. Wien CXVIII, Abt. I, p. 870 (Etym. *myxa* mucus et *Asterina*). — Membrana peritheciali et subiculo ut in *Asterina*; nucleo mucoso. Ascii apophysati, radiatim ex hyphenchymate basilari laxiusculo evoluti, breviter stipitati; sporidia brunnea, bilocularia.

1. **Myxasterina Strychni** v. Höhn., l. c. p. 868 et 871. — Peritheciis 5162 in subiculo tenui, folio arcte adnato insidentibus, scutellatis, margine lobulatis; ascis ex ovoideo-piriformibus breviter clavatis, superne crasse tunicatis, octosporis, 40-50 × 18; sporidiis conglobatis, elongatis, demum brunneis, bilocularibus, 12-16 × 5-6. — J. diu +.

Hab. in foliis Strychni sp., Depok in ins. Java.

Sect. 4. Hyalophragmiæ.

ASTERIDIUM Sacc. — Syll. I p. 49, IX p. 435, XI p. 269, XIV p. 699, XVI p. 650, XVII p. 785.

1. **Asteridium paulistanum** Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV, p. 29. — Peritheciis plerumque epiphyllis, matrici arctiusculæ adnatis, dimidiato-scutatis, centro prosenchymaticis ambitu subanhystis pallidis, margine reticulatim fimbriolatis, 150-200 µ. diam.; ascis antice obtuse rotundatis crasseque tunicatis, postice cuneatis brevissime crasseque pedicellatis, 60-70 × 25-30, octosporis, apophysatis; sporidiis conglobatis rectis vel lenissime curvulis utrinque acutiusculæ rotundatis, 32-36 × 6-7, primo 5-dein 7-postremo 9-septulatis, hyalinis, ad septum medium tantum constrictis.

Hab. ad folia coriacea Myrtacearum prope Ipiranga, Brasilia (USTEBI).

2. *Asteridium membranaceum* (Spegazz.) Spegazz., Fungi Paulist, 5164 Rev. Mus. La Plata t. XV, pag. 30. — Ita vocanda *Micropeltis membranacea* Speg. — Syll. IX, p. 1069 — ex ipso auctore

Fam. 11. Lophiostomataceæ ().*

Sect. 1. Hyalodidymæ.

LOPHIOSPHÆRIA Trev. — Syll. II p. 675, IX p. 1075, XI p. 383, XIV p. 702, XVII p. 886.

1. *Lophiosphæria tahitensis* Patouill., Bull. Soc. Myc. Fr. XXII (1906) 5165 p. 58. — Peritheciis atris, subhemisphæricis, basi insculptis, carbonaceis $\frac{1}{3}$ - $\frac{1}{2}$ mm. diam., fragilibus, ostiolis vix prominulis, linearibus, labiis obtusis; nucleo albo; ascis cylindraceis, basi attenuatis, apice rotundatis, 100-150 \times 15-19, octosporis, paraphysibus linearibus, simplicibus v. ramosis, hyalinis; sporidiis distichis, hyalinis, longe fusoideis, 1-septatis, medio leniter constrictis, saepe 4-guttulatis, 33-36 \times 6.

Hab. in endocarpio Cocos nuciferae Tahiti, Polynesia.

2. *Lophiosphæria Chusqueæ* Speg., Fungi Chilenses (1910) pag. 100, 5166 cum icon. — Peritheciis laxe gregariis, lenticularibus, epidermide clypeatim nigrefacta tectis, ostiolo minimo linearis donatis, 250-300 μ . diam.; ascis subclavatis breviter cuneato-pedicellatis, dense paraphysatis, 110-130 \times 18-20; sporidiis distichis e fusoideo biconoideis 1-septato-constrictis, majusculis, hyalinis, 35-40 \times 8-9.

Hab. in culmis siccis putrescentibus Chusqueæ valdiviensis, Bahia de Corral Chile Amer. austr. — Inter *Clypeosphæria* et *Lophiotrema* videtur media; sporidia vetustiora forsitan triseptata.

3. *Lophiosphæria Sedi* (Hazsl.) Sacc. et Trav. — Syll. XIX, p. 1129, 5167 *Lophiostoma Sedi* Hazsl. Sphær. Hungar. p. 80, t. IV, f. 17. —

(*) *Lophiostomaceæ* Sacc. Mich. I, pag. 337 (1878), non Fuckl! — *Sphaeromycetaceæ* Sect. VIII *platystomæ* Pers. (1801) ex parte, *Platystomeæ* Dumort. (1822).

A *Lophiotrema Sedi* (Fuck.) Sacc. Syll. II, p. 687, videtur diversa sporidiis bilocularibus, nec 3-septatis.

Hab. in caule *Sedi* sp. in Hungaria.

LAMBOTTIELLA Sacc. — Syll. II, p. 677 (ut subgen. *Lophiosphæriæ*),

XIV, p. 26. — A typo dignoscitur sporidiis appendiculatis. Ad hoc genus referendæ sunt: *Lamb. anaxæa* Sacc. — *Lam. b. glacialis* (Rehm) Sacc. — *Lamb. bonariensis* (Speg.) Sacc. — *Lamb. pulveracea* Sacc. — *Lamb. Fuckelii* Sacc. (Cfr. Syll. II, pag. 677-678). — *Lamb. heterostoma* (Ell. et Ev.) Sacc. (Cfr. Syll. IX, p. 1075).

1. **Lambottiella chilensis** Speg., Fungi Chilenses (1910) p. 99, cum 5168 icon. — Peritheciis foliicolis parenchymate immersis, 150-180 μ . diam., ostiolo cristato, carbonaceo, pro ratione majusculo, tantum exerto; ascis clavulatis, breviuscule paraphysatis, pedicellatis, 90-100 \times 10-12, octosporis; sporidiis distichis, ellipsoideo-biconoideis, inæquilateralibus, 4-guttulatis, hyalinis, utrinque minute appendiculatis, 15-17 \times 4-5.

Hab. in foliis dejectis putrescentibus *Persea* Lingue, Cerro Caracol de Concepcion Chile Amer. austr.

2. **Lambottiella corralensis** Speg., Fungi Chilenses (1910) p. 100. — 5169 — Peritheciis matrici infuscata plus minusve inscuptis, ostiolo minuto cristato carbonaceo coronatis, laxe gregariis, atris, glabris, 120-130 μ . diam.; ascis subcylindraceis breviter cuneato-pedicellatis, parce paraphysatis, octosporis, 80-100 \times 7-10; sporidiis didymis, biconoideis, subnavicularibus, mediocribus, hyalinis, primo tunica mucosa tenui vestitis, dein nudis, utrinque apiculo conoideo minuto auctis, 16-25 \times 5-7.

Hab. in pedunculis emortuis *Francoæ sonchifoliæ*, Bahia de Corral Chile Amer. bor. — Sporidiis permaturis verisimiliter triseptatis et tunc gen. *Vivianellæ* adscribenda.

3. **Lambottiella mendax** (Rehm) Sacc. et Trott., *Lophiosphaera mendax* 5170 Rehm Ann. Mycol. V, (1907) pag. 544. — Peritheciis gregariis, innatis, demum superficialibus, globulosis, nigris, ca. 0,3-0,4 mm. diam., ostiolo in papillulam angustam brevem elongato, glabris; ascis clavatis, 50-70 \times 8-9, octosporis; sporidiis ellipsoideis, utrinque acutatis et filiformiter 2-3 μ . longe appendiculatis, bicellulatis, medio constrictis, utraque cellula 2-guttata, hyalinis, 12 \times 4, distichis; paraphysibus filiformibus, septatis, hyalinis, 1,5 μ . cr.

Hab. ad ramulum exsiccatum *Epilobii* ?Fleischeri supra Waidbruck Tirolæ austr. (Dr. REHM).

Sect. 2. Phæodidymæ.

SCHIZOSTOMA Ces. et De Not. — Syll. II p. 673, IX p. 1074, XI p. 382, XIV p. 702, XVI p. 650, XVII p. 887.

1. **Schizostoma incongruum** Rehm in Rehm et Rick in Broteria V 5171 (1906) p. 225. — Peritheciis in crusta nigra stromatica late effusa arcte congregatis, innatis, hemisphaerico-prominentibus, globosis, apice rima tenuissima longitudinali, haud cristata apertis, atris, 0,3-0,5 mm. diam.; ascis cylindraceis, longissimis, 12-14 μ . latis, octosporis; sporidiis fusiformibus, utrinque acutatis, medio septatis, utraque cellula crasse 1-guttatis, primitus hyalinis, dein fuscidulis, ad septum non constrictis, 30-35 \times 9-10, monostichis paraphysibus filiformibus, 2 μ . crassis.

Hab. in culmis *Bambusa Taquarae* in Brasilia. — *Schizostomi hysteriodi* affine.

Sect. 3. Hyalophragmiæ.

LOPHIOTREMA Sacc. — Syll. II p. 678, IX p. 1076, XIV p. 703, XVI p. 651, XVII p. 887.

1. **Lophiotrema argentinense** Spegazz., An. Mus. Nac. Buenos Aires 5172 t. XIX (1909) p. 430. — Peritheciis sparsis v. laxe gregariis, sub-superficialibus, subglobosis, 200-300 μ . diam., acute ostiolatis, glabris; ascis clavatis basi attenuatis et in pedicellum brevem crassiusculum productis, 120-130 \times 20, octosporis, paraphysatis; sporidiis oblique v. recte mono-distichis, cylindraceo-fusoideis, 7-septatis, 40-45 \times 10, loculis minute 1-guttulatis, hyalinis.

Hab. in ligno denudato carioso induratoque *Prosopidis* cuius-dam, Alto Grande prov. San Luis, Argentina Americæ austr.

2. **Lophiotrema Halesiae** Fairman Annal. Mycologici, v. VIII (1910) 5173 p. 329. — Peritheciis gregariis, minutis, atris, immersis dein erumpentibus, ostiolo emergente compresso sed angusto; ascis clavato-cylindraceis, rectis v. curvulis, apice rotundatis, paraphysibus filiformibus obvallatis, 80-100 \times 10; sporidiis distichis, angustis, oblongo-fusoideis, saepe lunatis v. sigmoideis, utrinque acuminatis, 5-septatis, vix constrictis, hyalinis, 27-33 \times 3,33 \times 4,50.

Hab. in cortice *Halesiae tetraphpteræ* cultæ, Lyndonville N. Y. Amer. bor.

3. *Lophiotrema coffeicola* Speg., An. Mus. Nac. Buenos Aires t. XIX: 5174 (1909) p. 430. — Maculis nullis; peritheciis sparsis semiimmersis, minute et lineariter ostiolatis, carbonaceis, subglobosis, 120-150 μ . diam.; ascis fusoideis vix pedicellatis, 75-80 \times 10, paraphysatis, octosporis; sporidiis fusoideis 5-septatis, ad septum medium tantum constrictis, utrinque subacutiusculis, 22-24 \times 6, loculo tertio supero vix crassiore, loculis omnibus grosse 1-guttulatis.

Hab. ad corticem vetustiorem Coffea arabicae prope Orán Jujuy Argentina, America austr.

4. *Lophiotrema vagabundum* Sage. — Syll. II, p. 684 et IX p. 1081 5175 — var. *Hydrolapathi* Sacc., Ann. Myc. III (1905) p. 232, Syd. Myc. Germ. n. 322. — A typo sat ludibundo præcipue dignoscitur peritheciis paullo majoribus, nempe 0,3-0,5 mm. diam. et magis prominulis, ostiolo minus compresso.

Hab. in caulis emortuis Ruminis Hydrolapathi, Wannee prope Berolinum Germania (Sydow).

5. *Lophiotrema ? paspalicola* Spegazz., Anal. Mus. Nac. Buenos Aires 5176 t. XIX (1909) p. 430. — Peritheciis laxe gregariis innato-erum-pentibus, 150-180 μ . diam., ostiolo linearis vix papillato præditis; ascis cylindraceo-subclavulatis, basi longe sensimque attenuatis, in pedicello modice elongato productis, 90-100 \times 10-11, 4-8-sporis, paraphysatis; sporidiis fusoideis, saepius distichis, utrinque acutatis, 3-septatis, ad septa, ad medium validius, constrictulatis, loculo secundo supero tumidiore, 22 \times 5,5-6, primo hyalinis serius leniter chlorinis.

Hab. ad culmos dejectos putrescentes Paspali cujusdam pr. Tucumán Rep. Argentina America austr. — Species ostiolo obscure lophiostomideo ad *Leptosphaeriam* vergens; *Lophiostoma culmifrago* Speg. peraffine.

6. *Lophiotrema Arundinariae* Rehm, Ann. Mycol. V (1907) p. 532. — 5177 Peritheciis gregariis primitus epidermide denigrata tectis, dein liberis, globulosis, glabris, atris, nitentibus, ostiolo compresso crista brevissimo, poro perspicuo pertusis, 0,5 mm. diam., subcarbonaceis; ascis clavatis, apice rotundatis, 80-85 \times 10-12, octosporis; sporidiis fusiformibus, rectis, hyalinis, strato mucoso tenui obductis, 3-septatis, haud constrictis, 18-20 \times 3,5-4, distichis; paraphysibus filiformibus.

Hab. in Arundinariae culmo, São Leopoldo, Rio Grande do Sul, Brasiliae (Rück). — *Lophiotr. culmifrago* proximum.

VIVIANELLA Sacc. — Syll. II, p. 687 ut subg. *Lophiotrematis*; XIV, pag. 27 (Etym. a DOMINICO VIVIANI, Bot. prof. genuensi et claro mycologo). — A typo dignoscitur sporidiis utrinque appendiculatis. Ad hoc genus sunt referenda: *Viv. Sedi* (Fuck.) Sacc. — *Viv. affinis* (Speg.) Sacc. — *Viv. cristata* (H. Fabr.) Sacc. — *Viv. angustilabra* (B. et Br.) Sacc. — *Viv. Winteri* Sacc. — *Viv. aucta* Sacc. (Cfr. Syll. II, pag. 687-688) — *Viv. magellanica* (Speg.) Sacc. — *Viv. australis* (Speg.) Sacc. — *Viv. leucospora* (Nitschke) Sacc. (Cfr. Syll. IX, p. 1079).

1. *Vivianella chilensis* Speg., Fungi Chilenses (1910) pag. 101, cum 5178 icon. — Peritheciis laxe gregariis ligno denudato plus minusve infossis, coriaceo-subcarbonaceis, ostiolo linearis angustissimo praeditis, subglobosis, 200-250 μ . diam.; ascis cylindraceis, breviter pedicellatis, dense paraphysatis, 120 \times 15-18; sporidiis subfusoideis, 5-septato-constrictulis, subtorulosis, loculo mediano supero non veliter crassiore, utrinque appendice mucosa anguiformi acuta auctis, submajusculis, hyalinis, 30-35 \times 10-12.

Hab. in ramis siccis Eugeniae obtusæ?, in silvis Cerro Caracol de Concepcion Chile Amer. austr.

Sect. 4. Phæophragmiæ.

LOPHIOSTOMA Ces. et De Not. — Syll. II p. 689, IX p. 1083, XI p. 383, XIV p. 702, XVII p. 886.

1. *Lophiostoma xerophilum* Spegazz., An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 432, cum icon. — Peritheciis laxe gregariis, parvis, semieverticatis, subglobosis 250-400 μ ., eximie linearis ostiolatis non nitentibus, ostiolo apice compresso-truncato; ascis cylindraceis, brevissime pedicellatis, 150 \times 18-20, octosporis, paraphysatis; sporidiis ellipsoideis, fumosis, oblique monostichis, septis 5 crassis nigris variegatis, 25-30 \times 12-14, loculis saepius dense guttulatis.

Hab. ad partem internam corticis durioris Larreae divaricatae, Cacheuta prope Mendoza, Argentina America austr.

2. *Lophiostoma andicola* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 431. — Peritheciis densissime gregariis, plus minusve matrice immersis, carbonaceis, e globoso compressis, 150-250 μ . diam.; ascis clavatis deorsum longe sensimque angustatis, p. spor. 110-120 \times 14-16, pedicello 25-30 \times 5, octosporis, dense paraphysatis; sporidiis distichis subfusoideis 5-septatis utrinque acutiusculis, 28-30 \times 7-9, pallide olivaceis, loculis minute 1-guttulatis.

Hab. ad trunco ramosque denudatos Patagonii pinifolii, Puente del Inca, prope Mendoza, Argentina Amer. austr. — *L. macrostomo* De Not. affinis species sed certe distincta.

3. *Lophiostoma triseptatum* Peck — Syll. II, p. 691. — var. *dia-* 5181 *gonale* Fairm., The Pyren. of Orleans County, (Proc. Rochest. Acad. (1905) p. 186). — Sporidiis 17 \times 6,7, oblique triseptatis. In truncis Salicis, Orleans County Amer. bor. — Var. *acutum* Fairm. l. c. — Sporidiis monostichis, triseptatis, 20 \times 6-7 utrinque acutis. In ramis decorticatis Aceris, Orleans County Amer. bor. — Var. *pluriseptatum* Fairm. l. c. p. 185. — Ascis p. sp. 70-75 \times 10-12; sporidiis distichis v. oblique monostichis, oblongis v. clavato-oblongis, obtusis, initio 3-septatis, demum 4-5-septatis, ad septa constrictis, brunneis, 15-20 \times 5-6. In truncis Aceris, Lyndonville Amer. bor.
4. *Lophiostoma praandinum* Spegazz., An. Mus. Nac. Buenos Aires 5182 t. XIX (1909) p. 433. — Peritheciis laxe gregariis, matrice nigrafacta infossis, subglobosis, 200-300 μ . diam., carbonaceis; ascis e fusoideo clavulatis deorsum breviuscule pedicellatis, 130-150 \times 18-22, octosporis, paraphysatis; sporidiis subfusoideis, utrinque obtusiusculis, oblique distichis, 35-40 \times 9-11, 5-6-septatis, ad septa, ad medium vix validius, constrictulis, fuligineis, loculis 2 intimis leviter obscurioribus et saepius grosse guttulatis.

Hab. ad ramos decorticatos et emortuos Larrea nitidae, Cacheuta, prope Mendoza, Rep. Argentina America austr.

5. *Lophiostoma imperfectum* Ellis et Fairm. in Fairm. The Pyren. 5183 of Orleans County, in Proc. Rochest. Acad. (1905) pag. 187. — Peritheciis superficialibus, sparsis in areis denigratis, hemisphaericis, dein collabescientibus, vix 0,5 mm. diam., ostiolo leviter compresso, minuto; ascis clavato-cylindraceis, stipitatis, paraphysatis, 40-50 \times 6-8; sporidiis monostichis, v. sursum distichis, oblongo-elliptoideis, utrinque acutulis, 3-septatis, leviter constrictis, rectis v. curvulis, 12-18 \times 6-7, brunneis.

Hab. in caule emortuo Asclepiadis sp.?, Lyndonville N. Y. Amer. bor. — Sporidia in multis ascis imperfecte evoluta.

6. *Lophiostoma macrostomum* (Tode) Ces. et De Not. — Syll. II, 5184 pag. 700 — var. *septem-septatum* Sacc. ap. Berl. Ic. fungor. I, p. 14, t. 8, f. 8. — Dignoscitur sporidiis 7-septatis, 40-45 \times 9-11; peritheciis sparsis 0,5 mm. diam.

Hab. in cortice Salicis sp. in collibus Euganeis Ital. bor. — Extat quoque var. americana sporidiis 9-septatis (ELLIS).

7. *Lophiostoma humile* Speg., An. Mus. Nac. Buenos Aires t. XIX 5185 (1909) p. 431, cum icon. — Peritheciis laxe gregariis matrice immersis, carbonaceis, subglobosis, 120-150 μ . diam., ostiolo lineariter tenuissimo acuto ægre perspicuo tantum exerto; ascis cylindraceis breviuscule pedicellatis, 70-90 \times 9-12, tetrasporis, paraphysatis; sporidiis oblique monostichis, cylindraceis v. obsoletissime subbiconoides, utrinque obtusis, 20-22 \times 7-9, 3-septatis, loculis 2 intimis obscurioribus, omnibus grosse 1-guttulatis.

Hab. ad ramos emortuos dejectos Casuarinæ equisetifoliæ, Claypole, prope Buenos Aires Argentina America austr. — *L. quadrinucleato* Karst. cognatum; tunica ascorum jodi ope levissime cærulescit.

8. *Lophiostoma Ephedræ* Hollós, Ann. Mus. Nat. Hung. IV (1906) 5186 p. 330, tab. VIII, fig. 3 — Peritheciis epidermide tectis, globosis, nigris, 400-600 μ . diam., ostiolo 210-230 \times 140-180 epidermidem perforante, dein superficialibus; ascis cylindraceis, longe stipitatis, 90-100 \times 16-20 (parte sporifera); paraphysibus filiformibus, septatis, ramosis; sporidiis monostichis aut sursum inordinate distichis, oblongo-ellipsoideis, cylindraceis, initio hyalinis, 1-septatis, dein ochraceis 3-septatis, demum atro-brunneis, asperulis, aculeolatis, ad septa constrictis, 18-26 \times 8-10, plerumque 24 \times 9, loculis saepe inæqualibus.

Hab. in ramulis siccis Ephedræ distachyæ prope Kecskemét Hungariae. — Socia adest *Wojnowicia Ephedræ* quæ probabiliter ejus status pycnidicus.

Sect. 5. Hyalodictyæ.

LOPHIDIOPSIS Berl. — Syll. IX, p. 1093.

1. *Lophidiopsis chilensis* Speg., Fungi Chilenses (1910) p. 102, cum icon. — Peritheciis laxe gregariis ligno denudato omnino immersis globosis parvulis, ostiolo minuto angusto vix exerto, 120-150 μ . diam.; ascis e clavato subsaccatis breviuscule attenuato-pedicellatis, paraphysatis, 100-110 \times 16-18; sporidiis distichis ellipsoideis utrinque rotundatis hyalinis mediocribus, transverse 3-septato-constrictulis, loculis 1 v. 2 centralibus septo altero verticali divisionis, 18-22 \times 9-10.

Hab. in ramis siccis putrescentibus Trevoæ trinervis in collibus S. Bernardo prope Santjago Chile Amer. austr. — Forsan *Sphaeria angustata* Pers. huc pertinet.

Sect. 6. Phaeodictyæ.

PLATYSTOMUM Trev. — Syll. II p. 716, IX p. 1091, XIV p. 706, XVI p. 653 (sub *Lophidium*), XVII p. 889 (sub *Platystomum*).

1. **Platystomum argentinense** Spegazz., An. Mus. Nac. Buenos Aires 5188 t. XIX (1909) p. 434, cum icon. — Peritheciis tota matrice immersis subglobosis 250-300 μ . diam., carbonaceis, ostiolo angustissimo vix indicatis; ascis subcylindraceis abrupte graciliterque pedicellatis, parte sp. 110-120 \times 25-30, pedicello 30 \times 5, octosporis, paraphysatis v. paraphysibus parcissimis commixtis; sporidiis oblique mono- v. distichis, ellipsoideo-elongatis, 11-14-septato-muriformibus, olivaceis, 35 \times 12.

Hab. ad lignum induratum trunci cariosi Duvaucæ longifoliae, Santa Catalina, prope Buenos Aires Rep. Argentina Amer. austr. — *P. thryidoidi* (Sacc.) affine, ascis caudiculato-stipitatis sporidiisque paullo minoribus tamen recedens.

2. **Platystomum muriforme** (Hazl.) Sacc. et Trav. — Syll. XX p. 428 5189 — *Lophiostoma muriforme* Hazsl. Sphær. Hung. pag. 84, t. V, fig. 18. — Peritheciis . . . ; ascis cylindraceis apice rotundatis deorsum tenuato-stipitatis, filiformi-paraphysatis; sporidiis oblique monostichis, ellipsoideis, coloratis, utrinque rotundatis, 7-septatis, non constrictis, septis (ut videtur) ternis crassioribus, loculis 3-4 longitrorsum partitis.

Hab. in . . . in Hungaria.

Sect. 7. Scolecosporæ.

LOPHIONEMA Sacc. — Syll. II p. 717, IX p. 1094.

1. **Lophionema Bambusæ** von Höhnel, Stzb. k. Ak. d. Wiss. Wien 5190 CXVIII, Abt. I (1909) p. 323, cum icon. — Peritheciis gregariis, quandoque binis approximatis, nigris, subopacis, profunde immersis, hemisphaerico- v. semiovoideo-prominentibus, parietibus parenchymaticis firmis 60-90 μ . cr. pluristratosis praeditis, 0,5-1 mm. latis, 500-700 μ . altis, collo nullo, ostiolo compresso et rimoso donatis; ascis cylindraceis usque ad 300 μ . long., supra rotundatis ad 10 μ . latis, basi 8 μ ., tunica apice usque ad 4 μ . cr., J -, non pedicellatis, octosporis; paraphysibus numerosissimis, 1 μ . cr., su-

pra ramoso-reticulatis, ascos superantibus; sporidiis fasciculatis, hyalinis, filiformibus, utrinque obtusis, multisepztatis, 300 \times 1,8, articulis 6-10 μ . longis.

Hab. in vaginis siccis putrescentibus *Bambusa* sp. in Horto Bot. Buitenzorg in ins. Java.

Fam. 12. Hemhysteriaceæ.

PARMULARIA Lév. — Syll. II p. 661, XI p. 387, XIV p. 708, XVI p. 657.

1. **Parmularia dimorphospora** R. Maire, Ann. Mycol. VI (1908) p. 149, 5191 fig. 5, tab. I, fig. 4. — Stromatibus plus minusve regulariter suborbicularibus, crustaceis, nigris, 0,5-2 mm. diam., maculae brunneolæ saepe obsoletæ insidentibus, contextu microthyriaceo; peritheciis linearibus, pariete proprio destitutis, e centro stromatis plus minusve regulariter irradiantibus, rima angustissima dehiscentibus; ascis octosporis, junioribus ovoideo piriformibus, maturis oblongo-cylindraceis, sessilibus, 22-25 \times 8-9, crasse tunicatis, apice unifoveolatis, gelificatione dehiscentibus; sporidiis oblongo-cylindraceis, 11-14 \times 4, distichis, maturis episporio dilutissime brunneolo et minutissime verruculoso praeditis, guttulis oleosis lutescentibus farctis, ad medium septatis, vix constrictis, cellula superiore paulo latiore, inferiore paulo angustiore et saepius evidenter longiore; paraphysibus filiformibus, simplicibus vel parce ramosis, apice incrassatulis, contentu oleoso lutescente farctis; sporis secundariis filiformibus, curvatis, utrinque acutis, levibus, continuis, guttulis oleosis lutescentibus farctis, 15-25 \times 1,5-2, in sporophoris subhyalinis, cylindraceis, fasciculatis, circ. 10-15 \times 1-1,5, ascis immixtis, solitarie acrogenis.

Hab. in foliis vivis Myrtaceæ cujusdam, Mcndagui pr. Sao Paulo, Brasilia. — Sporidiis tenuiter verruculosis, sporulisque septorioideis inter ascos mixtis prædistincta species et a typo descens.

2. **Parmularia Hymenolepidis** P. Henn., Hedw. XLVII (1908) p. 261. 5192 — Stromatibus hypophyllis, sparsis, crustaceo-membranaceis, atris, dimidiato-scutellatis, 5-6 mm. diam., loculis radiato-plicatis, ramosis, longitudinaliter rimoso-dehiscentibus; ascis clavatis, obtusis, 8-sporis, 28-35 \times 6-7, paraphysibus copiosis, ascos superantibus,

apice conglutinatis, clavatis, flavo-brunneis; sporidiis subdistichis, oblonge ovoideis, 2-guttulatis, medio 1-septatis, flavo-fuscidulis, $10 \times 3-3.5$.

Hab. in foliis *Hymenolepidis spicatae*, Mindanao, Mt. Apo, 2000 m. alt., in ins. Philippin. (COPELAND). — *Parm. discoidea* affinis, sed distincta.

3. **Parmularia reticulata** Starb., Ascom. Schwed. Chaco-Cordill. Ex- 5198
ped., Arkiv. f. Bot. Bd V (1905) pag. 6, fig. 5. — Stromatibus
epiphyllis, gregariis, interdum nonnullis confluentibus, facile se-
cedentibus, fere membranaceis, ob perithecia elongata e centro
communi radiantia, apicibus exterioribus plus minusve distantibus
stellulatis, circ. 1 mm. diam.; peritheciis apicibus centralibus mu-
tua pressione compressis angustioribus, apicibus excentricis latio-
ribus, obtusis, $\frac{1}{4}-\frac{1}{2}$ mm. longis, circa 0,1 mm. latis, denique lon-
gitudinaliter rimose dehiscentibus, totis reticulo chordis myceliali-
bus anastomosantibus in hyphas 3,8-6,5 μ . crassas, circa stromata
retiformes transeuntibus, maculas longitudinales formantibus com-
posito circumtextis; ascis ovoideis, sursum magnopere incrassatis,
 $48-52 \times 19$; sporidiis octonis, conglobatis, medio uniseptatis, con-
strictulis, cellula superiore interdum sphærioidea vel duabus coni-
cis, primo hyalinis, denique fuligineis, membrana crassiuscula,
 $16.5-21.5 \times 7.5-10$; paraphysibus filiformibus, flexuosis, septatis,
ad septa superiora constrictis, circ. 5 μ . cr.

Hab. in folio humi jacente in rara silva Colonia Risso, Para-
guay (MALME). — Peritheciis magis divergentibus, reticulo vesti-
tis distincta species. Etiam *Parm. Styrcis* Lév. habet mycelium,
cujus chordæ stromata circumdantes in perithecia ascendunt, sed
vix sunt anastomosantes et reticulum manifestum non formant
(Starb. l. c.).

4. **Parmularia Stigmatopteridis** Ferd. et Winge, Botanisk Tidsskr., 5194
XXIX (1908) pag. 317, fig. 7. — Stromatibus primo simplicibus,
punctiformibus, ambitu circulari, habitu fere *Asterinæ*, mox autem
compositis, margine lobato, denique crustuliformi-confluentibus,
plagulas nigras, irregulares, nunc minutissimas, nunc ad. 2 mm.
elongatas, paginam inferiorem conspurcantes formantibus; peri-
theciis rimoso-hiantibus, flexuosis, inter se mæandriformi-sinuatis,
lente etiam ægre conspicuis, raro subtectis, e centro sterili radiantibus;
ascis sessilibus, juvenilibus saccatis, apice valde incrassatis,
maturis plerumque cylindraceo-clavatis, rarius clavatis v. irregu-
laribus, $30-40 \times 10-13$; sporidiis octonis, conglobatis, oblongo-cla-

vatis v. clavatis, uno- rarius biseptatis, medio constrictis, 12-15 ~ 5-6, griseo-brunneolis.

Hab. ad paginam inferiorem *Filicum* præcipue *Stigmatopteridis* nec non *Dryopteridis* patentis in America trop. et subtropicali.

HYSTEROSTOMELLA Spieg. — Syll. IX p. 1098, XI p. 385, XIV p. 708, XVI p. 655, XVII p. 892.

1. **Hysterostomella concentrica** Syd., Ann. Mycol. VII (1909) p. 544. 5195

— Stromatibus epiphyllis, sine maculis, sparsis, orbicularibus, 2-4 mm. diam., planis, crustaceis, atris, totis ex peritheciis concentrica ordinatis compositis; peritheciis in annulos 4-5 concetrice dispositis, dense aggregatis et sæpe confluentibus, subrotundatis subinde ellipticis, e mutua pressione sæpe angulatis, rima latiuscula aper- tis; ascis cylindraceo-clavatis, apice rotundatis ibique crasse tuni- catis, subsessilibus, 45-55 ~ 14-18, octosporis; sporidiis distichis, oblongis, utrinque rotundatis, 1-septatis, loculo superiore paullo majore, diu hyalinis, tandem fuscis, 14-18 ~ 4-5; paraphysibus filiformibus, ascos superantibus, conglutinatis et epithecium flavo- brunneolum formantibus.

Hab. in foliis vivis *Trichiliae* emeticæ, Africa or. lusitanæ (C. W. HOWARD). — *Habitus Hyster. andinæ* Pat.

2. **Hysterostomella elæicola** Maubl., Bull. Soc. Mycol. France XXIII 5196 (1907) pag. 143, tab. XX, fig. 11-15. — Stromatibus sparsis, epi- phyllis, in maculis pallidis, immarginatis incidentibus, irregulari- bus, lobatis, nigris, carbonaceis, usque ad 1 cm. diam.; peritheciis in quoque stromate numerosis, elevatis, flexuosis intricatis que rima longitudinali angusta demum aperitis; ascis ovoideis, apice rotundatis et hinc tunica crassiore præditis, octosporis, 50-55 ~ 15-20; sporidiis in asco inordinatis, primum hyalinis, medio 1-septatis duabus magnis guttulis præditis, demum ellipsoideis, obtusis, medio 1-septatis et lenissime constrictis, eguttulatis, pallide fuscis, 16-17 ~ 6.

Hab. in foliis *Elæis guineensis* Dahomey Guinea Africae.

*Fam. 13. Hysteriaceæ.**Subfam. 1. Hysteriæ.**Sect. 1. Hyalosporæ.*

SCHIZOTHYRIUM Desm. — Syll. II p. 723, IX p. 1100, XIV p. 710,
XVI p. 657, XVII p. 892.

1. **Schizothyrium macrosporum** D'Almeida et Da Camara, Bol. Soc. 5197
Brot. XXIV (1908-1909) Extr. p. 23. — Peritheciis amphigenis,
innato-superficialibus, sparsis, primo orbiculatis demumque elli-
psoideis, diu convexiusculis dein applanatis, rima longitudinali
percursis; ascis dense congestis, claviformibus, longe pedicellatis,
100-150 \times 15-17; sporidiis distichis, oblongo-fusoideis vel subelli-
psoideis, utrinque rotundatis, continuis, hyalinis, 17-20 \times 5; para-
physibus copiosissimis, filiformibus, ascos superantibus.

Hab. in foliis petiolisque *Hederae Helicis*, in Horto botan.
Coimbra Lusitaniae (A. MOLLER).

2. **Schizothyrium acuum** Bubák, Fünft. Beitr. Pilzfl. Tir., in Ber. na- 5198
turw.-med. Ver. Innsbruck, XXX Jahrg. (1905-1906) Extr. p. 6.
— Mycelio subcuticulari, ex hyphis ramosis, crebre septatis, brun-
neis et plagulas brunneas efficiente constituto; peritheciis grega-
riis, subcuticularibus, dimidiatis, convexis, nigris v. nigro-brunneis,
nitidis, primum rimulosis demum fere omnino apertis, flavidо-al-
bis, 100-200 \times 50-70; ascis ovoideis 30-38 \times 22-29, hyalinis, utrin-
que rotundatis, apice constrictulis, hyalinis, octosporis; sporidiis
confertis, elongatis, 13-18 \times 6,5-8, utrinque rotundatis, medio septa-
tis, hyalinis, contentu fortiter refringenti.

Hab. in foliis emortuis *Pini* sp., prope Meran Tirolia (CERNY).

3. **Schizothyrium Jaapii** (Rehm) Sacc. et Trott., *Aporia Jaapii* Rehm 5199
ap. Jaap in Abhandl. Bot. Ver. Brandenb. XLVII (1905) p. 84.
— Peritheciis gregariis, plerumque longitudinaliter dispositis, elon-
gatis, rectis, utrinque obtusis, nigris, rima elongata percursis, udis
discum dilute flavidum linearem tenui-marginatum ostendentibus,
200-300 \times 100; ascis clavatis apice rotundatis, octosporis, 25-30 \times
10-12; sporidiis fusoideis, rectis v. curvulis, unilocularibus, hya-
linis, 15-18 \times 3-4, tristichis; paraphysibus ramosis, conglutinatis.
hyalinis.

Hab. in rhachidibus siccis Aspidii spinulosi, Sattenfeld prope Oldesloe Schleswig-Holstein, Germania.

4. **Schizothyrium hysteroides** (Hazsl.) Sacc. et Trav. — Syll. XXI 5200 p. 753 — *Aporia hysteroides* Hazsl. Maygar. Discom. p. 194, t. III, f. 7. — Peritheciis ellipsoideis, rima latiuscula hiantibus, nigris; ascis clavatis breviter crasseque tenuato-stipitatis, apice subrotundatis, octosporis; paraphysibus filiformi-clavatis, sursum coloratis; sporidiis distichis, ellipsoideis, utrinque rotundatis, subinde inaequilateris, guttulatis, hyalinis, 10-16 \times 5-6.

Hab. in foliis languidis . . . in Hungaria.

Sect. 2. Hyalodidymæ.

AULOGRAPHUM Lib. — Syll. II p. 727, IX p. 1101, XI p. 386, XIV p. 711, XVI p. 659, XVII p. 895.

1. **Aulographum valdivianum** Speg., Fungi Chilenses (1910) p. 110. — 5201 Minutissimum, sparsum v. laxe gregarium, lineare v. vix furcatum, utrinque obtusiusculum, glabrum, membranaceum, nigrum, 250-500 \times 40-50; ascis obovatis, brevissime pedicellatis, obsolete pseudoparaphysatis, 20-25 \times 10-12, octosporis; sporidiis ellipsoideis v. biconoideis, non v. lenissime subclavulatis, 1-septato-constrictulis, hyalinis, parvis, 8-10 \times 2,5.

Hab. in ramis siccis Rubi sancti prope Ciudad de Valdivia Chile Amer. austr. — Observante cl. Spegazzini l. c. genus *Aulographum* ad *Hemhysteriaceas* propius accedit.

2. **Aulographum Chusqueæ** Speg., Fungi Chilenses (1910) pag. 109, 5202 cum icon. — Minutum, hinc inde pauci-gregarium (3-10) lineare v. furcatum, utrinque obtusum, glabrum, membranaceum, nigrum, 600-1000 \times 30-80; ascis ovoideis, brevissime crasseque pedicellatis, a paraphysatis, 25-28 \times 14-18, octosporis; sporidiis conglobatis, elliptico-didymis, hyalinis, parvis, 10-12 \times 3-4.

Hab. in culmis siccis et plus minusve putrescentibus Chusqueæ valdiviensis prope Bahia de Corral Chile Am. austr.

3. **Aulographum donacicolæ** Spegazz., An. Mus. Nac. Buenos Aires 5203 t. XIX (1909) p. 441. — Peritheciis superficialibus plus minusve gregariis, atris, subellipsoideis, 150-200 \times 75-100, rima angustissima dehiscentibus, margine vix denticulato-repandulis; ascis subcylindraceis, supra subtruncato-rotundatis crassissimeque tunicatis, basi abrupte cuneatis, pedicello brevissimo nodulosoque suffultis, 30-

35 ~ 12, octosporis, aparaphysatis; sporidiis distichis v. subconglobatis, 10-12 ~ 5-6, medio 1-septatis, non vel leniter constrictulis, hyalinis, loculis grosse 1-guttulatis.

Hab. ad culmos dejectos putrescentes Arundinis Donacis in sepibus Lezama, prope Buenos Aires America austr.

GLONIUM Mühl. — Syll. II p. 731, IX p. 1102, XI p. 386, XIV p. 711, XVI p. 661, XVII p. 896.

1. **Glonium uspallatense** Speg., An. Mus. Nac. Buenos Aires t. XIX 5204 (1909) p. 436, cum icon. — Peritheciis sparsis v. laxe gregariis, erumpentibus, linear-ellipticis vix convexulis, 250-500 ~ 100-150; ascis clavatis apice crasse tunicatis, basi sensim attenuatis, pedicello brevissimo suffultis, octosporis, paraphysatis, 100 ~ 20; sporidiis obovato-didymis, conglobatis, 20-22 ~ 10-11, medio 1-septatis, loculis inaequalibus.

Hab. ad ramos vetustiores emortuos decorticatos Bulnesiæ Retamo in praandinis Uspallata prope Mendoza, Argentina America austr.

2. **Glonium araucanum** Speg., Fungi Chilenses (1910) pag. 110. — 5205 — Peritheciis sparsis, longitudinalibus, subsuperficialibus, linearibus, utrinque obtusiusculis, parvis, 0,5-1,5 mm. long., 0,25-0,35 mm. lat., rima angusta impressa percursis, atris, carbonaceis; ascis cylindraceis, breviuscule pedicellatis, non v. parcissime paraphysatis, 100-110 ~ 18-20; sporidiis mono- v. distichis, mediocribus, elliptico-biconoideis, hyalinis, ad medium 1-septato-constrictulis, prima tunica mucosa tenui vestitis, dein nudis, 20-24 ~ 8-10.

Hab. in sarmentis siccis et subputridis Lardizabalæ in silvis prope Cerro Caracol de Concepcion Chile Amer. austr.

3. **Glonium chilense** Speg., Fungi Chilenses (1910) p. 111. — Sparsum, parvum, e ligno denudato erumpens, plus minusve infossum, e cinereo atrum, carbonaceum, glabrum, lineare, utrinque acutum, rima ægre perspicua dehiscens, 1-1,5 mm. long., 0,300-0,350 mm. lat.; ascis subcylindraceis breviter pedicellatis, paraphysatis, 60-70 ~ 10-12, octosporis; sporidiis mono- v. distichis, clavulato-didymis, hyalinis, subparvis, 15-16 ~ 7-8.

Hab. in ramis siccis Cryptocaryæ? in silvis Cerro Caracol de Concepcion Chile Amer. austr. — *Gl. linearis* affine.

4. **Glonium valdivianum** Speg., Fungi Chilenses (1910) pag. 114. — 5207 Peritheciis gregariis, erumpenti-superficialibus, minutis, atris, utrinque obtusiusculis, leniter rimosis, atris, 0,3-1 mm. long., 0,15-

0,25 mm. lat. et alt.; ascis cylindraceis breviter pedicellatis, paraphysatis, 45-50 \times 6-7; sporidiis clavulatis, didymis, hyalinis, parvis, 8 \times 3.

Hab. in ligno vetusto denudato Perseæ Lingue prope Ciudad de Valdivia, Chile Amer. austr. — *Glon. microsporo* Sacc. affine a quo differt ascis et sporidiis minoribus.

5. **Glonium microsporum** Sacc. — Syll. II, p. 736 — var. *palmincola* 5208 Theiss., Beih. Bot. Centralbl. Bd. XXVII (1910) Abt. II, p. 407.

Ascomatibus ellipticis v. interdum fere globosis, rima tenuissima dehiscentibus, carbonaceo-duris; ascis cylindraceis gracilibus, pedicellatis, p. sp. 52-60 \times 5,5, pedicello c. 12-15 \times 2,5; paraphysibus dense constipatis ascis superantibus, tenuibus; sporidiis hyalinis, reticis v. oblique monostichis, ad septum non v. vix constrictis, utrinque acutatis v. etiam rotundatis, cellula inferiore sæpe paullo angustiore, quaque cellula 1-guttata, 9-10,5 \times 3-3,5.

Hab. in ligno Palmarum, Rio Grande do Sul Brasiliæ. — Var. *minus* Speg., Annal. Mus. Nac. Buenos Aires t. XVII (1908) p. 130. — Peritheciis 0,25-0,50 \times 0,20-0,25; ascis 40-50 \times 4; sporidiis 7-8 \times 3-4. — Vulgatum in disco sectionum ramorum truncorumque in Matto Queimado et San Pedro Rep. Argentina in America australi.

6. **Glonium Chusqueæ** Speg., Fungi Chilenses (1910) pag. 112, cum icon. — Peritheciis laxe gregariis, erumpentibus, linearibus, angustis, utrinque subacutiusculis, carbonaceis, rima ægre perspicua dehiscentibus, 0,5-1 mm. long., 90-100 μ . lat. et alt.; ascis ex obovato ellipsoideis, abrupte graciliterque pedicellatis, a paraphysatis, 30-40 \times 12; sporidiis cylindraceo-ellipsoideis parvis, hyalinis, sæpius grosse 4-guttulatis, ad medium 1-septato-constrictulis, 13-14 \times 4.

Hab. in ramulis siccis Chusqueæ valdiviensis, Bahia de Carracol Chile Amer. austr.

7. **Glonium Cumingii** Speg., Fungi Chilenses (1910) p. 113 cum icon. 5210 — Maculis ellipticis indeterminatis cinerescentibus; peritheciis laxe gregariis, erumpenti-subsuperficialibus, parvis, linearibus, utrinque acutiusculis, rima angusta dehiscentibus, subcarbonaceis, 0,3-1,5 mm. long., 0,1-0,25 mm. lat. et alt.; ascis ovoideis v. ellipsoideis, sessilibus v. brevissime crasseque pedicellatis, pseudoparaphysibus subcoalescentibus obvallatis, 40-50 \times 20-30; sporidiis congregatis subclavulatis submediocribus, hyalinis, 1-septato-constrictulis (an postremo 3-septatis et fumosis?), 20-24 \times 6-7.

Hab. in culmis emortuis putrescentibus Chusqueæ Cumin-

gii, Cerro Caracol de Concepcion, Cerro Alegre de Valparaiso, Chile Amer. austr. — *An Glonii Chusqueæ* Speg. forma?

ACTIDIUM Fr. — Syll. II p. 738.

1. **Actidium pulchellum** Rick, Broteria IV (1905) p. 161. — Stromati- 5211
bus (peritheciis?) primitus nigris, *Asterinæ* formam imitantibus cum
3-4 radiis, dein dehiscentibus ad modum *Hysterii* et discum palli-
dum exhibentibus; ascis 100-125 \vee 8-10; sporidiis octo, filiformibus
60-75 \vee 1, non septatis (uti videtur); paraphysibus paucis, versus
apicem 3 μ . latis, non ramosis, ex ascis abortivis reductis.

Hab. in foliis cujusdam arbusti incogniti, Torres Vedras Lusi-
taniæ. — Vix *Actidii* species, nam sporidia non hyalodidyma, sed
filiformia. Potius *Cocomyctes* sp.

Sect. 3. Phæodidymæ.

LEMBOSIA Lév. — Syll. II p. 741, IX p. 1104, XI p. 387, XIV
p. 712, XVI p. 663, XVII p. 897.

1. **Lembosia Dipterocarpi** P. Henn., Hedwigia XLVII (1908) p. 261. 5212
— Maculis mycelii epiphyllis, rotundatis, atro-crustaceis, sparse
gregariis, ca. 2 mm. diam.; peritheciis gregariis, linearibus, flexuo-
sis, atris, saepè anastomosantibus v. ramosis, longitudinaliter rimo-
so-dehiscentibus; ascis ovoideis vel ellipsoideis, 40-55 \vee 30-40, 8-
sporis, obtusis; sporidiis conglobatis, ellipsoideis v. ovoidēis, medio
1-septatis, constrictis, intus granulatis, atris, 26-30 \vee 16-20.

Hab. in foliis Dipterocarpi grandiflori, Luzon, Prov.
Bataan, Lamao ins. Philippin. (COPELAND).

2. **Lembosia Erythrophlæi** P. Henn., Engl. Jahrb. XXXVIII (1905) 5213
p. 115. — Peritheciis superficialibus sparsis, dimidiato-scutellatis,
ellipsoideo-oblongis, atro-fuscis, 350-450 \vee 200-250, longitudinaliter
rimoso-dehiscentibus, contextu celluloso, atro-castaneo, hyphis ra-
diatim circumdati atro-fuscis, pseudopodiis subovoideis, alterna-
tibus, 15-18 \vee 10-14; ascis ovoideis v. ellipsoideis, apice tunicatis,
octosporis, 50-70 \vee 40-50; sporidiis conglobatis, ellipsoideis v. ovo-
ideis, 2-guttulatis, medio 1-septatis, constrictis, atris, 30-35 \vee 12-18.

Hab. in foliis Erythrophlæi guineensis, Dar-es-Salâm
Zanzibar Africæ (HOLTZ).

3. **Lembosia congregata** Syd., Ann. Mycol. VIII (1910) pag. 40. — 5214
Hypophylla, maculis indistinctis vel subnullis insidens; peritheciis
Syll. fung. XXII (XI-1912)

innato-superficialibus, carbonaceis, in greges orbiculares atros subiculo radiante fibrilloso ex hyphis obscure brunneis denseque intertexitis composito circumdatos, 3-5 mm. latos dense confertis, subinde confluentibus, primitus globulosis, dein ellipticis vel angulatis, ca. 300-500 μ . longis, atris, rima longitudinali dehiscentibus; ascis late clavatis, apice rotundatis incrassatisque, 45-60 \times 24-32, 2-4-sporis; sporidiis distichis, ellipsoideo-oblongis, utrinque rotundatis, medio valde constrictis, primo hyalinis, tandem obscure brunneis, 26-32 \times 13-18; paraphysibus numerosis, filiformibus, hyalinis.

Hab. in foliis *Rhododendri* spec., Banajao, provincia of Laguna, Luzon, ins. Philipp. (C. B. ROBINSON). — *Lemb. Albersii* affinis sed sporidiis crassioribus in asco binis v. quaternis mox dignoscenda.

4. *Lembosia Drymidis* Lév. — Syll. II, p. 743, IX, p. 1105 — var. 5215 *baccharidincola* Röhlm., Ann. Mycol. V (1907) p. 532; VII (1909) p. 407. — Maculis mycelii epiphyllis, orbicularibus, haud rite conspicuis, fusco-nigritulis, 2-4 mm. diam.; hyphis mycelium tenuissimum formantibus, subramosis, fuscis, 5 μ . crassis, ex basi peritheciis centrifugaliter repentinibus; peritheciis primitus semiglobosis, 2-6 in centro mycelii arcte adnatis, rimis trigonis apertis, 0,1-1,5 mm.; ascis ovoideo-globosis, 40 \times 30, octosporis; sporidiis oblongis, utrinque rotundatis, primitus hyalinis, dein fuscis, medio septatis et subconstrictis, utraque cellula sæpe 1-guttata, 18-20 \times 9-10.

Hab. in foliis *Baccharidis* vivis, Nossa Senhor, Sao Paulo Brasiliæ (USTERI). — A typo differt peritheciis epiphyllis dispersis, sessilibus in maculis late diffusis nigro-fuscidulis, primitus hemisphaericis, clausis, dein fere semper 3-4-gonis, rarissime sublongatis.

5. *Lembosia Coccolobæ* Earle, Bull. of the New York Bot. Gard. 5216 (1904) pag. 301. — Epiphylla; maculis brunneis, primum sæpe stellatis, dein orbicularibus, 4-6 mm. v. confluentibus et subeffusis; mycelio sparso, fusco, mox late effuso, hyphis continuis vel sparse septatis, hinc inde subramosis et anastomosantibus, angustis, 3-4 μ . cr.; hyphopodiis sessilibus, ovoideis, obscure fuscis, parvis, circ. 7 \times 5; ascomatibus sparsis, discretis, nigris, linearibus, rectis v. curvulis, apice obtusis, 300-600 \times 100, subiculo angusto, ex filis mycelialibus 15-40 μ . long. constituto; ascis ellipsoideis 35 \times 20; sporidiis inordinatis, curvatis, inæqualiter uniseptatis, hyalinis, 16 \times 7.

Hab. in foliis vivis *Coccolobæ uviferæ*, Porto Rico Amer. centr. (HELLEB.).

6. **Lembosia microtheca** Theiss., Beih. Bot. Centralbl. Bd. XXVII 5217 (1910) Abt. II, p. 411. — Maculis epiphyllis vix perspicuis, lenissime fuliginascentibus, minutis, 2-4 mm. diam., indeterminatis; mycelio vix sub lente visibili, ex hyphis sparsis, laxe oppositoramosis, late fuligineis, 2,5 μ . cr. composito; hyphopodiis raris, alternis, ramuliformibus, estipitatis, rectis, cylindraceis, 5-8 \times 2; peritheciis densuscule aggregatis, aterrimis, linearibus, rectis vel curvulis, dimidiato-convexis, contextu brunneo subconcentrice radiante, rima tenuissima dehiscentibus, longitudine variabilibus, 180-300 \times 70-90; ascis oblongo-ellipsoideis, 25-30 \times 9-11, interdum deorsum paullo angustatis et proinde subclavatis, 8-sporis; sporidiis demum brunneis, distichis, oblongis, 9-10 \times 2,5-3, loculo inf. paullo angustiore et longiore; paraphysibus copiosis simplicibus filiformibus flexuosis, ascos obvallantibus.

Hab. in foliis Gœppertiae hirsutæ, São Leopoldo Rio Grande do Sul Brasilie.

7. **Lembosia Rolfsii** W. T. Horne, Bull. Torr. Bot. Cl. (1905) p. 69, 5218 cum icon. — Maculis 1-2 cm. long. cauem plus minus ambientibus, e flavo-brunneo demum nigricantibus; hyphis continuais atro-brunneis, parce ramosis, haustoriis brevibus hinc inde præditis; peritheciis irregulariter sparsis, oblongis, simplicibus v. furcatis v. triradiatis, saepe curvis, 350-1000 \times 160, nigris, latiuscule sulcato-rimosis; ascis late clavatis v. elongato-ovatis, basi obtuse tenuatis, 20-40 \times 8-15, apice dehiscentibus; paraphysibus copiosis, septatis, apice obtusis; sporidiis subocononis, biseriatis vel inordinatis, oblongo-ellipsoideis, constricto-1-septatis, utrinque obtusulis, hyalinis, 2-guttatis v. demum minute 2-4-guttulatis, nigricantibus, 10-16 \times 4-5.

Hab. in caulis adhuc viridibus Vanillæ planifoliae, Miami Fla. Amer. bor. (ROLFS).

8. **Lembosia Saccardoana** Bacc., Funghi Eritr., Ann. Bot. IV (1906) 5219 p. 275, tab. X, fig. 7. — Epiphylla; maculis ellipticis rubiginosis, saepe longitudinaliter seriatis, 5-7 mm. longis, et 2-3 mm. latis; peritheciis rugosis, atris, punctiformibus vel ellipticis, 150-200 μ . latis, sparsis, nigris, superficialibus, subiculo tenui fibrilloso atroviridi insidentibus; ascis ovato-rotundis, 70 \times 42, paraphysatis; sporidiis rotundis, didymis, ad medium leviter constrictis, tandem castaneo-fuscis, 28 \times 14.

Hab. in foliis Sansevieræ sp., Mahdet in montibus Marmaroba Erythrææ (PAPPI).

9. *Lembosia pachyasca* Bres., in Rick, Fungi austro-amer. III-IV, 5220 n. 76, Ann. Myc. IV (1906) p. 312. (Nomen nudum).
Hab. in foliis Myrsines spec. in Brasilia America austr.
10. *Lembosia similis* Bresad., in Rick Fungi austro-amer. III-IV, 5221 n. 60, Ann. Myc. v. IV (1906) p. 310. (Nomen nudum).
Hab. in Brasilia, America austr.

TRYBLIDIUM Duf. — Syll. II p. 740, IX p. 1103, XI p. 387, XVI p. 662 et 1145.

1. *Tryblidium argentinense* Speg., An. Mus. Nac. Buenos Aires t. XIX 5222 (1909) p. 437. — Peritheciis sæpius laxe gregariis erumpenti-superficialibus tumidis, elongato-ellipsoideis 1-3 mm. long., 0,6-0,8 mm. diam., rima profunda percursis, coffeicoloribus; ascis cylindraceis basi crasse breviterque pedicellatis, 180-200 \times 15, sæpius tetrasporis, dense paraphysatis; sporidiis monostichis, cylindraceis 1-septatis rectis v. lenissime inæquilateralibus, 36-38 \times 11-13, primo hyalinis dein flavidis serius opace fuligineis.
Hab. ad ramulos emortuos Heteropteridis cujusdam in Colle Cerro San Bernardo, Salta, Argentina, America austr.
2. *Tryblidium guaraniticum* Speg. — Syll. IX, p. 1103 — var. *majus* 5223 Speg., Annal. Mus. Nac. Buenos Aires t. XVII (1908) p. 131. — Ascis 200 \times 15-20; sporidiis 28-30 \times 10-12.
Hab. vulgatum ad ramos dejectos putrescentes Ilicis paraguriensis, Rep. Argentina Amer. austr.
3. *Tryblidium Elasticæ* Koord., Botan. Untersuch. (1907) pag. 162, 5224 fig. 5. — Ascomatibus coriaceis, patellarioideis, primum hypophlœoideis, dein emergentibus, vix 1,5 mm. diam.; marginibus subintegris; subsessilibus, sparsis, glabris, in sicco fuscis; ascis clavatis, 4-6-sporis, paraphysatis, 70 \times 30; sporidiis oblongatis, utrinque rotundatis, cribroso-muriformibus, leviter coloratis v. hyalinis, 35-35,5 \times 14-15; paraphysibus copiosis, valde conglutinatis et confluentibus, epithecium crassum, fuscum formantibus.
Hab. in cortice vulnerato Fici elasticæ prope Karanggajan prov. Kedu, Java (KOORDERS).
4. *Tryblidium Pandani* Patouill., Bull. Soc. Myc. France XXII (1906) 5225 p. 53. — Epiphyllum; sparsum, minutum, vix 0,5 mm. cr.; peritheciis erumpentibus, fusoideis, simplicibus v. furcatis, rectis v. curvulis, disco fusco-atris, extus aterrimis; ascis brevibus, 45 \times

20, octosporis, copiose paraphysatis; sporidiis brunneis, ovoideis, medio 1-septatis constrictisque 15-18 v. 8.

Hab. in foliis Pandani, Rikitea Polynesiae.

Sect. 4. Hyalophragmiæ.

GLONIELLA Sacc. — Syll. II p. 765, IX p. 1112, XI p. 388, XIV p. 717, XVI p. 666, XVII p. 903.

1. **Gloniella insularis** Vouaux, Bull. Soc. Mycol. Fr. (1910) p. 156. — 5226

Peritheciis gregariis, superficialibus, elongatis, utrinque attenuatis rotundatisque, rectis v. varie curvulis, rima longitudinali tenuissime aperientibus, plerumque bisulcatis, nigris, 1,5-3 mm. long., 0,75 mm. latis; ascis cylindraceis, estipitatis. 125-140 v. 11, octosporis; sporidiis uni-biseriatis, hyalinis, primum uniseptatis, deinde 5-septatis, tertio loculo latiore, singulo loculo guttulato; fusoideis, utrinque attenuatis rotundatisque, sed inferiore parte tenuiore, 18-26 v. 6-8; paraphysibus paulo longioribus quam ascis, ramosis, massa gelatinosa agglutinatis.

Hab. in vetusto cortice ignoto, Ile des Pins Nova Caledonia (LE RAT). — *Gl. pseudocommæ* Rehm affinis sed peritheciis atque ascis majoribus, sporidiis hyalinis nec flavidulis, 5-septatis nec 3-7-septatis.

2. **Gloniella araucana** Speg., Fungi Chilenses (1910) p. 115. — Pe- 5227

ritheciis dense gregariis subsuperficialibus, minutis linearibus, rima parum profunda percursis, atris, carbonaceis, 0,3-1 mm. long., 0,15-0,20 mm. lat. et alt.; ascis subclavatis breviter cuneato-pedicellatis, parce pseudo-paraphysatis, 100 v. 20-22; sporidiis fusoideis, hyalinis, primo 4-blastis, dein triseptatis, ad medium leniter constrictis, submajusculis, 40 v. 8-10.

Hab. in culmis siccis subputrescentibus Cusqueæ Cumini-gii, Cerro Alegre de Valparaiso, Chile Amer. austr.

MERRILLOPELTIS P. Henn., Hedwigia XLVII (1908) p. 261 (Etym. a cl. MERRILL). — Perithecia subinnato-superficialia, orbiculari-scutata, longitudinaliter rima angustissima dehiscentia, cornea; ascis cylindracei, octospori, paraphysati; sporidia longe fusoidea, 3-pluri-septata, hyalina.

1. **Merrilliopelets Calami** P. Henn., l. c. p. 262. — Peritheciis inna-to-superficialibus, dense gregariis, orbiculari- v. ellipsoideo-scuta-

tis, cocciformibus, brunneis, 1,5 mm. c. longis, 1 mm. latis, longitudinaliter rima angustissima dehiscentibus, contextu corneo brunneo v. fuscō; ascis longe cylindraceis, vertice obtuso-rotundatis, 240-260 \times 6-7, 8-sporis, paraphysatis; sporidiis longe fusoides, utrinque acutis, hyalinis, primo medio 1-septatis, deinde 3-pluriseptatis subconstrictis, 50-75 \times 4-5.

Hab. in truncis Calami sp., Mindoro, Mt. Halcon, ins. Philippin. (MERRILL).

PSEUDOGRAPHIS Nyl. — Syll. II p. 769, IX p. 1116, XIV p. 717, XVII p. 905.

1. **Pseudographis Orni** Rehm, Contr. Myc. Hung. (Növ. Közl. (1905) 5229 p. 4). — Peritheciis erumpentibus, mox sessilibus, dispersis, primus globosis, clausis, dein urceolatis, crasse marginatis, demum ex orbiculari hysteriformiter elongatis et discum labii medio distantibus denudantibus, atris, glabris, subnitidis, 120 \times 25, octosporis; sporidiis ellipsoideis, transverse, 3-5-septatis, quaque cellula guttam 1 magnum includente, ad septa subconstrictis, hyalinis, 30-40 \times 12-15, distichis; paraphysisibus filiformibus, apice 3 μ . cr. et cæruleis; epithecium crassum formantibus; hypothecio flavidulo; excipulo crasso, parenchymatico, nigro.

Hab. in cortice Fraxini Orni supra balnea Herculis (Herkulesfürdö) Hungariæ (LOJKA, 1872). — Perithecia exsiccata labiis sæpe arte conniventibus fere hysterioidea, interdum striatula. An Cenangellæ Fraxini propinqua?

2. **Pseudographis intermedia** Rehm, Ann. Mycol. VI (1908) p. 313. 5230

— Peritheciis dispersis, oblongis, sub peridermio verruciformiter elevato clausis, innatis, dein eo longitudinaliter disisso et adhaerente labiisque vix distantibus apertis, demum super peridermum prominentibus, disco plerumque oblongo, rarius orbiculari plano, margine irregulariter subcrenulato cinctis, postremo fere sessilibus, atris, extus glabris, irregularibus, 1-1,5 mm. longis, 0,5-1 mm. lati; ascis cylindraceis, apice subtruncatis, c. 200 \times 15, octosporis; sporidiis fusiformibus transverse 5-7-septatis, hyalinis, 25-30 \times 6-7, strato mucoso 5-7 μ . lato obductis, 1-stichis; paraphysisibus filiformibus, septatis, 2 μ . cr., versus apicem dilutissime fuscidulis, haud incrassatis, scabriusculis; hypothecio fuscidulo; excipulo parenchymatico.

Hab. in cortice Thujæ v. Cupressi sp. (*Cedar*) in M. Ta-

coma Wash. Amer. bor. (S. A. HABER). — A *Pseudogr. pinicola* sporidiis monostichis, Jodo non tinctis, strato mucoso obductis probe dignoscenda.

Sect. 5. Phæophragmiæ.

HYSTERIUM Tode em. — Syll. II p. 743, IX p. 1108, XI p. 387, XIV p. 715, XVI p. 664, XVII p. 907.

1. **Hysterium chilense** Speg., Fungi Chilenses (1910) p. 117. — Pe 5231
ritheciis sparsis v. plus minusve gregariis, longitudinalibus, subsuperficialibus, linearibus, utrinque obtusiusculis, parvis, rima angusta impressa percursis, atris, carbonaceis, 0,5-1,5 mm. long., 0,25-0,35 mm. lat. et alt. (in *Lardizabala*?), 0,4-1 mm. long., 0,20-0,30 mm. lat. et alt. (in *Lithrea*); ascis obclavatis brevissime crasseque pedicellatis, densiuscule paraphysatis, 70-80 \times 10-16; sporidiis distichis submediocribus, subcylindraceis, 3-septato-constrictulis, fuligineis, loculis duobus interioribus obscurioribus, 16-22 \times 5-6.

Hab. in sarmenis siccis vel fere putridis Lardizabalæ?, Cerro Caracol de Concepcion, et in ramis Lithreae causticae Cerro Alegre de Valparaiso, Chile Amer.-austr.

2. **Hysterium graphideum** Speg., An. Mus. Nac. Buenos Aires t. XIX 5232 (1909) p. 438. — Peritheciis 3-5 dense constipatis, linearibus, non v. vix flexuosis 0,5-1 mm. long., 100-150 μ . lat., rima latiuscula dehiscentibus, matrice leniter dealbata insidentibus, nigris, glabris, opacis; ascis subclavulatis breviter crasseque pedicellatis, 60 \times 12, octosporis, dense paraphysatis; sporidiis distichis subcylindraceis, 3-septatis, 20 \times 6, ad septa, ad medium validius, subconstrictulis, primo hyalinis dein chlorinis.

Hab. ad trunco cariosos vetustos Corallodendri (*Erythrinae*) cristagalli, Isla Santiago prope La Plata, Argentina America austr. — Species habitu valde lichenoso sed thallo omnino destituta; jodi ope membrana ascorum lenissime cærulescit.

3. **Hysterium batucense** Speg., Fungi Chilenses (1910) p. 116, cum 5233 icon. — Peritheciis ligno denudato cinerescente innato-erumpentibus linearibus utrinque subacutiusculis, rima tenui impressa percursis, atris, glabris carbonaceis, 0,5-2 mm. long., 0,25-0,30 mm. lat. et alt.; ascis subcylindraceis, breviter cuneato-pedicellatis, parvissime paraphysatis, octosporis, 120-130 \times 20-25; sporidiis mono-

v. distichis, e cylindraceo subellipsoideis, mediocribus, typice 5-septatis, loculo mediano supero non v. leniter crassiore, fuligineis, 28-32 \times 12-13.

Hab. in ramis siccis Proustiae pungentis in collibus pr. Batuco Chile Amer. austr.

4. *Hysterium pulicare* Pers. — Syll. II, p. 743. — * *H. Totaræ* Sacc. 5234 subsp. n., Ann. Mycol. VI (1908) p. 554. — A typo differt peritheciis multo minoribus, nempe 700 \times 400 et levioribus, sporidiis tamen non dissimilibus sed paullo brevioribus, nempe 18-19 \times 5,5-6, fuligineis, utrinque vero pallidioribus; ascis 90-100 \times 11.

Hab. in cortice levi Podocarpi Totaræ in Horto bot. Padavino, Jul. 1908 (AUG. NALESSO). — Ambigit inter *H. vulgare* De Not. et *H. pulicare* Pers.

5. *Hysterium samoënse* v. Höhnel, Fragm. z. Mykol., Sitzb. k. Ak. 5235 d. Wiss. Wien, Bd. CXVI, Abt. I (1907) p. 131. — Peritheciis superficialibus, arcte gregariis, linearibus, nigris, plerumque curvulis, $1\frac{1}{4}$ -1 mm. long., confluendo usque ad 3 mm. long., 50-120 μ . latis, utrinque acutis, circ. 80 μ . altis, nigris, carbonaceis, rima angusta apertis et discum nigro-brunneum ostendentibus; paraphysisibus crassis, firmis, epitheciū violaceo-brunneum efformantibus; ascis ovoideis, supra fortiter incrassatis, 32 \times 16, suboctosporis; sporidiis polystichis, diu hyalinis dein olivaceo-brunneis, pellucidis, elongato-clavatis, utrinque rotundatis, 4-5-locularibus, ad septa non constrictis, cellulis terminalibus plerumque crassioribus, 15 \times 5.

Hab. in ligno indurato, Leolomuenga, Upolu Samoa (RECHINGER).

6. *Hysterium Hoyaæ* P. Henn., Hedwigia XLVII (1908) p. 261. — 5236 Peritheciis amphigenis, sparse gregariis, oblongis, rectis v. curvatis, utrinque obtusis, atris, longitudinaliter rimose dehiscentibus, 180-220 \times 80-100; ascis oblongis v. clavatis, 8-sporis, 24-26 \times 10-15; sporidiis subtristichis v. congregatis, fusoideis v. clavatis, 3-septatis, fuscis 10-14 \times 3-3,5.

Hab. in foliis Hoyæ sp., Mindanao, Davao ins. Philippin. (COPELAND).

7. *Hysterium Velloziæ* P. Henn., Hedwigia XLVII (1908) p. 269. — 5237 Peritheciis sparsis v. gregariis, superficialibus, elongatis v. linearibus, interdum curvulis, leviusculis, atro-opacis, usque ad 1 $\frac{1}{2}$, mm. longis; ascis clavatis, obtusis, 8-sporis, 120-130 \times 18-20, paraphysisibus copiosis, superantibus, filiformibus, hyalinis, ca. 2 μ .

crassis; sporidiis subdistichis, fusoideis, 15-20-septatis, fuligineis, 35-50 \times 12-13.

Hab. ad truncum *Velloziæ* sp., Ouro-Preto, 1400 m. alt.
(SCHWAKE 1892).

8. *Hysterium angustatum* Alb. et Schw. — Syll. II, p. 746. — var. 5288
lophiooides Rehm, in Rehm et Rick, Broteria V (1906) p. 225. —
Peritheciis dispersis v. 3-5 gregariis, sessilibus, linearibus, obtusis,
rectis, raro curvulis, lophioideis non conchiformibus, tenuissime
transverse striatis, rima angustissima percursis, nigris, basim ver-
sus fuscescentibus, crasse carbonaceis, 1-3 mm. long., 0,4 mm. lat.,
1-3 mm. alt.; ascis clavatis, 150 \times 8-9, octosporis; sporidiis cylin-
draceis, utrinque obtusis, 3-septatis, subconstrictis, cellula secunda
sæpe sublatiore, fuscidulis, 18 \times 3-3,5, distichis; paraphysibus fili-
formibus epithecium coloratum non formantibus.

Hab. ad lignum in Brasilia (Doct. RICK S. J.).

9. *Hysterium ? Cyperi* Engels Abhandl. Senckenb. nat. Ges. XXIX 5289
(1908).

Hab. in pliocæne super. in Germania.

Hysterii species dubiæ sequentes enumeratæ sunt in Sylloge XIX,
pag. 962: *Hysterium arachnoideum* Schum. — *H. bilabiatum* Tode
— *H. cæruleum* Tode — *H. candidum* Tode — *H. quadrilabiatum*
Tode — *H. rameale* (Fr.) Sacc. et Trav., *Xyloma rameale* Fr. Obs.
mycol. II, t. VIII, f. 6 (sine diagnosi).

TRYBLIDIELLA Sacc. — Syll. II p. 757, IX p. 1110, XI p. 388, XVI
p. 665, XVII p. 908.

1. *Tryblidiella argentinensis* Spegazz., Anal. Mus. Nac. Buenos Aires 5240
t. XIX (1909) p. 438. — Peritheciis per corticem erumpentibus
sæpius ellipsoideis, rima latiuscule hiante dehiscentibus, primo sub-
araneosis dein glabratibus; ascis cylindraceis basi cuneato-pedicellatis,
160-200 \times 10-12, 4-6-8-sporis, paraphysatis; sporidiis e cylindraceo
subfusoideis, subcymbiformibus, 32-40 \times 8-10, 1-2- v. sæpius 3-se-
ptatis, e ferrugineo fuligineis.

Hab. ad ramulos dejectos putrescentes *Allophilii* cujusdam
in Parque Roca, Tucumán, Argentina America austr.

2. *Tryblidiella mandanaoensis* P. Henn., Hedwigia XLVII (1908) 5241
p. 261. — Peritheciis erumpentibus, cæspitosis, subcoriaceis, ob-
longis, rectis v. curvulis, atris, labiis tumidis levibus, 1-2,5 mm.
c. longis, 0,3 mm. latis, disco atro-fusco, levi; ascis subclavatis

obtusis, 8-sporis, p. spor. 140-160 \times 17, paraphysibus obvallatis, hyalinis; sporidiis oblongis, subcurvulis, utrinque obtusis, 3-septatis, atro-brunneis v. castaneis, oblique monostichis, 20-30 \times 10-12.

Hab. ad corticem arboris, Mindanao, Zamboanga, San Ramon ins. Philippin. (COPELAND).

3. *Tryblidiella tetraspora* Massee, Kew. Bull. n. 7 (1906) p. 257. — 5242
Peritheciis erumpentibus, alte exertis, ellipsoideis seu subtrigonis, 2-4 mm. lat.; labiis tumidulis, atris, striatulis, intus involutis; disco plano, rufo-fulvescente; ascis cylindraceis, apice rotundatis, tetrasporis, basi attenuato-stipitatis, 250 \times 20, paraphysibus densissimis longioribus, vertice fusco-fuligineis obvallatis; sporidiis monostichis, oblongo-ellipsoideis, utrinque rotundatis, triseptatis, ad septa non v. vix constrictis, brunneis dein atro-fuligineis, opacis, 50 \times 15.

Hab. ad ramos emortuos, Aburi Gold Coast Guinea Africæ occ. (JOHNSON).

HYSTEROPATELLA Rehm, Disc. p. 300 et 367 (Etym *Hysterium* et *Patella*). — *Perithecia innato-erumpentia, atra, membranaceo-subcoriacea, oblonga v. lanceolata, demum late aperta, tenuiter marginata; disco subplano saepe disolori. Asci breviusculi, paraphysibus ramosis apice coloratis obvallati, octospori. Sporidia oblonga v. fusoidea, pluriseptata, demum brunneola.* — Genus inter *Hysteriaceas* et *Phaciaceas* medium.

1. *Hysteropatella discolor* (Speg.) v. Höhn., Ergeb. Bot. Exp. Süd-bras. 1901, Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 30, *Hysterium discolor* Speg. — Syll. II, p. 747 — var. *coccinea* v. Höhnel, l. c. — A typo distinguitur disco rotundato, etiam in sicco aperto, subcoccineo, nec rufo-ferrugineo.

Hab. ad fragmentum ligneum pr. Butantan, Sao Paulo Brasiliæ.

Sect. 6. Hyalodictyæ.

HYSTEROOPSIS Rehm (1887) — Syll. IX p. 1118, XVII p. 909 — *Hysteropsis* Speg. (1906) vix recedere videtur sporidiis amplis et cerebrimmo septatis, denique fumosis (*).

(*) Ecce diagnosim cl. Spegazzini:

Hysteropsis Spegazz., Micromicetas de las Cacayeros, Rev. Facult. Agro-

1. **Hysteropsis brasiliensis** (Speg.) Sacc. et Trott., *Hysteriopsis brasiliensis* Spegazz., Micromic. de los Cacaoyeros in Rev. Facult. Agron. y Veterin. La Plata t. II (1906) p. 308, f. E. — Matrice sordide pallescenti-flavesciente, corrugato-subtuberculosa; peritheciis crassis, coriaceis duriusculis innato-erumpentibus late linearibus rarius suborbicularibus, 1-4 mm. long., 0,75-1,25 mm. lat., 0,50-0,75 mm. alt., rectis v. flexuosis saepe lobulatis, apicibus obtusis, marginibus verticalibus epidermide matricis primo adpressa dein relaxata vestitis, acie acutiuscula albida, disco planiusculo v. concaviusculo, mox aperto pruinuloso-cinereo, per aetatem fuscente v. nigricante donata; ascis cylindraceis antice subtruncato-rotundatis postice breviuscule crasseque cuneato-pedicellatis 250 ~ 35, paraphysibus densissimis coalescentibus apice fusco-crustosis obvallatis ac ægre perspicuis; sporidiis rectis distichis cylindraceis subellipticis 60-80 ~ 18-20, utrinque subattenuato-rotundatis rectis v. lenissime curvulis, saepe medium versus parcissime attenuatis, primo cribrosis, hyalinis, serius septis horizontalibus 16-24 donatis, ad septa constrictulis, loculis septis verticalibus 1-3 parum manifestis divisis, fumosis, postremo corrugatis difformibus atque fuscis.

Hab. in caule Theobromæ Cacao, Bahia de todos los Santos, Brasilia (HEMPEL).

2. **Hysteropsis corticola** (Fr.) Sacc. et Trav. — Syll. XIX, p. 964 — 5245
Hysterium corticola Hazsl. in Verhandl. zool.-bot. Gesell. Wien (1887) pag. 155, tab. 3, f. 7, non *Hyst. lineare* var. *corticola* Fr. Elench. II, pag. 140, quod = *Hysterium* (*Hysteropatella*) *Prostii* Duby. — Peritheciis linearibus, utrinque rotundatis, levibus, in cortice sessilibus, saepe transverse positis; ascis parce filiformi-paraphysatis, fusoideis, utrinque obtuse acutatis, basi breviter tenuato-stipitatis; octosporis; sporidiis distichis oblongo-ellipsoideis, hyalinis, rectis, utrinque obtusulis, initio 1-septatis, mox 3-septatis, denique 7-septatis, 20-24 ~ 9-11, loculis nonnullis longitudina-liter 1-septatis.

Hab. in ramis corticatis Pruni Padi, Eperies Hungariæ.

nom. y Veter. La Plata t. II (1906) nn. 4-6, p. 308. — Perithecia erumpenti-superficialia, crassa, extus levia, glabra, mox rimose dehiscentia, atque late hiantia, epithecio planiusculo cinereo acute limitato donata; ascis cylindracei dense paraphysati 8-spori; sporidia majuscula, elliptico-cylindracea, primo cribrosa, hyalina dein dense murali-septata, fumosa. — Genus eximum lacunam n. 68 *Hysteriarum* Tabul. comp. (Syll. XIV, p. 26-27) replens, habitu externo *Colpomati* simillimum.

GLONIOPSIS De Not. — Syll. II p. 772, IX p. 1116, XIV p. 717,
XVII p. 909.

1. **Gloniopsis Lojkæ** Rehm, Ann. Mycol. IV (1906) p. 339. — Peritheciis ligno late dealbato innatis, parallele seriatis, dispersis, primus globosis et plane obtectis, dein poro minuto apertis, demum hysteriformibus, rima longitudinali apertis, utrinque acutatis, labiis crassis medio distantibus discum planum atrum denudantibus, senilibus supra ligni superficiem derasam exstantibus, excipulo crasso carbonaceo, ligno arcte connato, 0,5-2 mm. long., 0,5-2 mm. lat.; ascis clavatis, apice rotundatis, 4-8-sporis, c. 100 \approx 15; sporidiis ellipsoideis, transverse 3-5, longitudinaliter plerumque 2-septatis, ad septa haud contractis, subhyalinis, 15-18 \approx 8-9, distichis; paraphysibus filiformibus, septatis, ad apicem subramosis et fuscidulis, epithecium fuscum formantibus.

Hab. ad lignum Fraxini Orni in monte Treskovácz in Banatu prope Danubium (LOJKA).

2. **Gloniopsis araucana** Speg., Fungi Chilenses (1910) p. 118, cum icon. — Maculis nullis; peritheciis sparsis, erumpenti-superficialibus linearibus utrinque rotundatis, atris, coriacello-membranaceis, opacis, 0,75-1 mm. long., 0,25-0,30 mm. lat. et alt.; ascis cylindraceo-subclavulatis breviter crasseque cuneato-pedicellatis, paraphysibus densis submucoso-coalescentibus obvallatis, 100 \approx 20, octosporis; sporidiis cylindraceo-ellipsoideis, distichis, transverse 7, longitudinaliter 1-septatis, ad septa tria primaria constrictulis, hyalinis, 24-28 \approx 12-13.

Hab. in scapis siccis subputridis Francoë sonchifoliae, prope Bahia de Corral Chile Amer. austr.

3. **Gloniopsis xylogramma** Vouaux, Bull. Soc. Mycol. Fr. (1910) p. 157. — Peritheciis gregariis, linearibus, utrinque attenuatis atque acutis, emergentibus v. superficialibus, 1-3 mm., plerumque 2 mm. long., 0,25 mm. latis, nigris, rima longitudinali tenui hiantibus; ascis elongatis, estipitatis, 60 \approx 20, octosporis; sporidiis uni-biseratis, hyalinis, ovoideis, transverse triseptatis, cum uno septo longitudinali, recto v. obliquo, in singulo loculo, 11-14 \approx 5-8; paraphysibus numerosissimis, asco paulo longioribus, agglutinatis.

Hab. in ligno putrescente ignoto, Nouméa Nova Caledonia (CACOR).

4. **Gloniopsis ambigua** Sacc., in Ann. Myc. X (1912) p. 317. — Peritheciis gregariis, longitudinaliter parallelis, rectis, lineari-lanceolatis, nigris, depresso-depressis, 1-1,5 mm. long., 0,3 mm. lat., rima angu-

stissima exaratis; ascis clavatis, breviter sensim stipitatis, 75-80 \times 10-12, apice obtusatis, 6-8-sporis; paraphysibus filiformi-clavulatis tertia parte superiori opacè nigricantibus et epithecium atrum formantibus; sporidiis oblongo-clavulatis, utrinque obtusulis, 5-septato-muriformibus, medio non v. vix constrictis, 16-17 \times 5-5,5, hyalinis, farctis.

Hab. in ramis decorticatis putrescentibus *Quercus* sp. (ut videtur), Castel Gandolfo prope Romam vere 1904 (D. SACCARDO). — Ab affini *Gl. Cisti* Rehm — Syll. IX, p. 1118 — distingui videtur sporidiis clavulatis, vix constrictis, ascisque paullo minoribus, paraphysibus tertia parte superiori incrassatis aterrimitis, nec non matrice.

Sect. 7. Phaeodictyæ.

HYSTEROGRAPHIUM Corda — Syll. II p. 776, IX p. 1119, XI p. 389, XIV p. 718, XVI p. 668, XVII p. 912.

1. **Hysterographium fuegianum** Speg. — Syll. IX, pag. 1121 — var. 5250 *intermedium* Rehm in Swensk. Vet. Akad. Handl. XXV (1899) p. 11, t. 17, f. 17 (extr.). — A typo distinguitur peritheciis utrinque acutiusculis v. obtusiusculis et saepe longioribus, nempe 2 mm. long., 0,5-0,8 mm. cr.; sporidiis elliptico-biconicis, 8-10-septatis, verticaliter quoque 2-3-septatis, strato mucoso tenuissimo obductis.
- Hab.* ad ramos putres Fagi antarcticæ, Punta Arenas Rio Grande Brasiliæ. — Forma media inter *H. fuegianum* et *H. magellanicum*.
2. **Hysterographium Elasticæ** Koord., Botanisch. Untersuch. (1907) 5251 p. 163, fig. 7. — Peritheciis oblongis, erumpenti-superficialibus, atris, coriaceis, labiis tumidis latiuscule hiantibus, 1-2 mm. longis et 150-300 μ . latis; ascis clavatis, apice rotundatis, haud incrassatis, octosporis, 90-100 \times 20-25, sessilibus; sporidiis distichis, oblongis, utrinque rotundatis, 28-30 \times 10-13, 6-9-septato-muriformibus medio haud constrictis, pallide olivaceo-fuscescentibus; paraphysibus filiformibus, asco longioribus, apice clavatis.

Hab. in cortice vulnerato Fici elasticæ prope Karangga-jam prov. Kedu Java (KOORDERS).

3. **Hysterographium varians** Vouaux, Bull. Soc. Myc. Fr. (1910) p. 157. 5252 — Peritheciis irregularibus, primum ovoideis deinde elongatis, fusiformibus v. etiam linearibus, utrinque acutiusculis v. rectis v.

sæpius varie curvulis, dense gregariis, late apertis, utrinque unisulcatis, parvis, primum 0,4 mm. long., 0,2 mm. latis, deinde 0,5-1 mm. long., 0,2 mm. latis, nigris; ascis elongato-claviformibus, estipitatis, octosporis, 90 \times 14; sporidiis biseriatis, ellipsoideis, utrinque rotundatis, medio constrictis, septis transversis præcipuis 3, secundariis 1-2 v. etiam 4; septo longitudinali 1 in loculis mediis, rarius etiam in loculis extremis, 20 \times 8.

Hab. in vetusto cortice ignoto, Indo-China.

4. *Hysterographium elongatum* (Wahl.) Corda — Syll. II, p. 777 — 5258
var. *orobicum* Rota-Rossi, III Contr. Mic. Bergamo, Atti R. Ist. bot. Pavia ser. II, v. XIII p. 290 (extr. 1907). — A typo differt sporidiis recte, demum leniter oblique, monostichis, transverse 5-septatis, medio non vel vix constrictis, 20-25 \times 10-12.

Hab. ad lignum decorticatum, Foppenico, Bergamo Italia bor.

5. *Hysterographium Cumingii* Speg., Fungi Chilenses (1910) p. 119, 5254
cum icon. — Peritheciis laxe gregariis, innato-erumpentibus, non v. vix prominulis, anguste linearibus longiusculis, sordide fuscis, carbonaceis, 0,5-5 mm. long., 0,25-0,30 mm. lat.; ascis obclavatis subsessilibus non v. parcissime paraphysatis, 70-80 \times 14, octosporis; sporidiis distichis ellipsoideo-elongatis utrinque subacutiusculis, typice transverse 7-septatis, loculis uno v. altero v. omnibus septis 1 v. 2 longitudinalibus divisis, fuligineis, mediocribus, e latere leviter angustioribus, 20-22 \times 5-8.

Hab. in culmis putrescentibus Chusqueæ Cumingii, Cerro Aleoore de Valparaiso Chile Amer. austr.

Sect. 8. Scolecosporæ.

HADOTIA R. Maire, Champ. Asie Min., Bull. Soc. Sc. Nancy (1906) pag. 11 (Etym. a Doct. HADOT, mycologo vogesiaco). — Perithecia superficialia oblongata, membranaceo-carbonacea, longitudinale dehiscentia; asci 8-spori, cylindraceo-clavati; sporidia filiformia, hyalina, unilocularia v. septata, parallele stipitata; paraphyses filiformes. — In Tabulis comparativis generum præsens exacte occupabit n. 30 inter *Hysteriaceas* (Syll. XIV, p. 26-27).

1. *Hadotia nivalis* R. Maire, Champ. Asie Min., Bull. Soc. Sc. Nancy (1906) Extr. p. 12, fig. 2. — Peritheciis culmigenis, sparsis, nigris, nitidis, levibus, membranaceo-carbonaceis, oblongatis, utrinque rotundatis, 0,75 - 1,25 \times 0,50 - 0,75 mm., rima peritheciis

longitudinem æquante demum hiantibus; hymenio hygrophano, udo griseo, sicco albido; ascis cylindraceo-clavatis, apice conoideo, obtuso, sessilibus v. breviter pedicellatis, 80-110 \times 8-11; sporidiis parallele stipatis, rectis v. flexuosis, apice rotundatis, basi longe attenuatis, acutis, 50-80 \times 1,5-2, saepe 1-3-septatis; paraphysibus filiformibus ascos superantibus, apice flexuosis v. circinatis.

Hab. in culmis siccis Alopecuri textilis Boiss. in zona alpina M. Argæi Cappadocia Anatolia. — Socia adest *Leptostromella nivalis* quæ status imperfectus esse videtur.

HYPODERMA DC. — Syll. II p. 784, IX p. 1113, XI p. 389, XIV p. 719, XVI p. 669.

1. **Hypoderma andinum** Speg., An. Mus. Nac. Buenos Aires t. XIX 5256 (1909) pag. 485, cum icon. — Peritheciis laxe gregariis innato-erumpentibus, atris, elliptico-linearibus 0,4-1 mm. long., 200-250 μ . diam., rarissime bilobis v. furcatis, per etatatem longitudinaliter dehiscentibus; ascis clavulatis basi sensim longeque attenuatis, in pedicellum subbrevisculum productis, 70 \times 16-18, octosporis, paraphysatis; sporidiis distichis v. oblique monostichis subbotuliformibus, leniter curvulis, 14 \times 3-4, hyalinis.

Hab. ad ramulos nec non ad spinas vivas v. languidas Patagonii pinifolii, Puente del Inca, prope Mendoza Argentina America austr.

2. **Hypoderma ptarmicola** Fairm., Proc. Rochest. Ac. of Sc. IV (1906) 5257 p. 216, tab. XX, fig. 2. — Peritheciis elongatis, erumpentibus, 1-4 mm. long., primum apertis, siccis fere clausis, margine integris, regularibus, quandoque incurvatis, extus nigris, intus e rubro-brunneo brunneis, arescendo subolivaceis; ascis clavato-cylindraceis, apice angustatis, basi longe et anguste pedicellatis, 74-125 \times 10-13, plerumque 80-90 \times 10; sporidiis oblongis, rectis v. curvis, apice acutatis, 33-35 \times 2-3, guttulatis et septis endochromaticis spuriæ uniseptatis.

Hab. in caulinibus siccis Achilleæ Ptarmicæ, Lyndonyville N. Y. Amer. bor.

3. **Hypoderma Werthianum** P. Henn., Deutsche Südpolar Exped. Bd. 5258 VIII (1906) Extr. p. 9, t. I, f. 12. — Maculis pallidulis; peritheciis innatis, oblonge subpulvinatis, amphigenis, sparsis v. striiformi-gregariis, atris, membranaceis, rima longitudinali dehiscentibus, 0,6-0,8 \times 4-5 mm. diam.; ascis subfusideo-clavatis, basi attenuato-substipitatis, vertice tunicatis obtuso-rotundatis v. subacutiusculis,

75-100 \approx 10-15, octosporis; paraphysisbus filiformibus, repetito-ramosis, hyalinis, c. 2 μ . cr., apice haud incrassatis; sporidiis subtristichis v. conglobatis, bacillaribus, rectis v. curvulis, utrinque obtuso-rotundatis, interdum subattenuatis, pluriguttulatis vel septulatis, hyalinis, leviter cyanescentibus, 35-40 \approx 2-2,5.

Hab. in foliis Poæ Cookii Hook. f., Possession-Insel Crozet-Gruppe (E. WERTH).

LOPHODERMİUM Chev. — Syll. II p. 791, IX p. 1124, XI p. 390, XIV p. 720, XVI p. 670, XVII p. 913.

1. **Lophodermium Mangiferæ** Koord., Botan. Untersuch. (1907) p. 163, 5259 fig. 6. — Peritheciis plerumque hypophyllis sparsis, innatis, plus minusve prominentibus, membranaceis, ellipsoideis, rima longitudinali dehiscentibus, 0,4-0,6 mm. longis, nudis, nigris, labiis depresso-oblatis; ascis cylindraceo-clavatis, octosporis, apice obtusis v. acutis, 80-90 \approx 5-6; sporidiis parallele stipatis, filiformibus, rectis, 70-80 \approx 1, hyalinis, continuis, multiguttulatis; paraphysisbus filiformibus, apice clavatis vel uncinatis vel clavato-flexuosis, ascum subæquantibus.

Hab. in foliis emortuis Mangiferæ indicæ prope Penung-galan prov. Kediri Java (KOORDERS).

2. **Lophodermium alliaceum** Feltg., Vorst. Pilzfl. Luxembg. Nachtr. IV 5260 (1905) pag. 34. — Peritheciis sparsis v. gregariis, basi immersis, elongatis, ellipsoideis v. subcircularibus, utrinque obtusis, convexis, rima angusta apertis, tenuiter marginatis, nigris opacis, striatulis 0,3-0,8 mm. long., 0,2-0,5 mm. latis; ascis clavatis, supra obtuse angustatis, basi in pedicellum attenuatis, rectis, octosporis 80-95 \approx 8, hyalinis, paraphysisbus filiformibus superantibus, rectis v. incurvatis obsitis; sporidiis polystichis, acicularibus, utrinque acutatis, rectis v. curvulis, unilocularibus, guttulatis, hyalinis, in asco flavescentibus, 30-40 \approx 1-1,5.

Hab. in bracteis Allii oleracei, Höhenhot Luxemburgia. — *L. sphaeroideo* (A. S.) Duby affine.

3. **Lophodermium Luzulæ** Hazsl. Magyar Discom. p. 186, t. III, f. 6. 5261 — Peritheciis oblongis v. lanceolatis, rima lata apertis; ascis clavatis, breviter noduloso-stipitatis, apice obtusule-acutatis, bacillari-paraphysatis, octosporis; sporidiis polystichis, clavulato-bacillaribus, multi-pseudoseptatis, hyalini.

Hab. in foliis languidis Luzulæ maximæ in Hungaria.

4. **Lophodermium arundinaceum** (Schrad.) Chev. — Syll. II, p. 795 5262

— var. **Piptatheri** Ranojevic, Ann. Mycol. VIII (1910) p. 354. — Peritheciis ellipsoideis, apice rotundatis vel subattenuatis, nigris, rimosis, . . . 0,3-0,5 × 0,20-0,25; ascis clavatis, apice obtuse attenuatis, basi in pedicellum breviter attenuatis, 48-65 × 7-8, octosporis; sporidiis filiformibus, parallele dispositis, 32-48 × 1, hyalinis; paraphysibus filiformibus, septatis, supra uncinatis v. contortis, integris v. raro apice furcatis, 76 × 1-1,5.

Hab. in foliis siccis **Piptatheri paradoxi** prope Krepoljin, Serbia.

Subfam. 2. Ostropeæ.

Sect. Scolecosporæ.

ROBERGEA Desm. — Syll. II p. 806, IX p. 1128.

1. **Robergea Albicedræ** (Heald et Wolf) Sacc. et Trav. — Syll. XX, 526 p. 695 — *Cyanospora Albicedræ* Heald et Wolf, Mycologia (1910) n. 5, p. 209-210, t. XXXI et f. 1-3 pag. 206-210. — Pustulis stromaticis in areis corticis v. ligni dealbatis oblongo-lenticularibus, obtuse prominulis, laxe gregariis v. 2-3-coacervatis, 1-2 mm. long.; peritheciis 1-2 in quoque stromate, sapius solitariis, 825-1200 × 260-400, horizontaliter elongatis, tenuiter membranaceis, omnino immersis, in ostiolum laterale obtusulum tenuatis; ascis cylindraceis 700-1100 × 8-10, deorsum leviter tenuatis, apice obtusis tunica incrassata, supra basim denique fissis erumpentibusque; paraphysibus filiformibus, 1 μ. cr.; sporidiis filiformibus varie curvatis v. contortis, crebro multiseptatis, 600-1000 × 3, ex hyaline cyaneis, articulis cuboideis paullo longioribus quam latis.

Hab. in cortice v. ligno decorticato Juniperi (Sabinæ) sabinoidis, Texas usque ad Mexicum. — Est certe *Robergæa* species, diversa tamen videtur a speciebus jam cognitis.

2. **Robergea unica** Desm. — Syll. II, p. 806 — var. *divergens* Rehm 526 in Strasser Verh. k. k. zool.-bot. Ges. Wien LVII (1907) p. 324. — Peritheciis *Sphaeriæ*-formibus sub cortice denigrato ligno insidentibus, dein erumpentibus et excipulum albo-pruinosum 1,5 mm. latum exerentibus, disco subrotundo nigro, in portum minutum apertis; sporidiis distincte septatis.

Hab. in ramis siccis Piri Mali, Sonntagberg Austriae inf.

Syll. fung. XXII (XI-1912)

*Subfam. 3. Acrospermeæ.**Sect. Scolecosporæ.*

ACROSPERMUM Tode Syll. II p. 807, IX p. 1128, XIV p. 723, XVI p. 1146.

1. **Acrospermum ochraceum** Syd., Ann. Mycol. V (1907) p. 361. — 5265
Peritheciis sparsis, solitariis vel subinde binis trinis basi connexis,
erectis, clavatis, valide compressis, ochraceis, basi saepe paullo di-
lutioribus, glabris, apice obtusis, basi breviter stipitatis, 1-2 mm.
longis, 250-400 μ . latis; ascis cylindraceis, longissimis, 200-350 \approx
3-4; sporidiis filiformibus, tenuissimis, ascorum fere longitudine,
hyalinis, 0,5 μ . crassis.

Hab. in foliis emortuis vel putrescentibus Bambusæ, Rio de Janeiro, Tijuca, Brasilia.

2. **Acrospermum coniforme** Spegazz., An. Mus. Nac. Buenos Aires 5266
t. XIX (1909) p. 440. — Peritheciis sparsis saepius epiphyllis, co-
noideis v. sublageniformibus, 250-300 \approx 100-150, glabris, fulvellis,
ascis linearibus basi longe tenuiterque attenuato-pedicellatis 180-
200 \approx 4-5; paraphysatis, octosporis; sporidiis filiformibus fascicu-
latis, 140-150 \approx 0,5-0,7, hyalinis.

Hab. ad folia languida Diplachnis latifoliae in hortis pr.
Tucumán Amer. austr.

DISCOMYCETÆ Fr. (*)

Syll. VIII p. 3, X p. 1, XI p. 391, XIV p. 378, XVI p. 695,
XVIII p. 1.

Fam. 1. Myriangiaceæ NYL.

Teste cl. v. HÖHNEL, qui fungillos huc relatos, diligenter scrutatus est (Cfr. Sitz. k. Akad. Wissensch. Wien, CXVIII, Abt. I, Apr. 1909) ad hanc familiam spectantia ta itum seq. genera recognoscit et ita distinguit:

I. Stroma plus minus carbonaceum, nigrum.

Eurytheca de Seyn. — Sporidia tantum transverse septata. [*Eurytheca monspeliensis* de Seyn.]

Myriangium Mont. et Berk. — Sporidia clathrata, hyalina. [*M. Duricei* Mont. et Berk. = *Phymatosphæria abyssinica* Pass. = *Pyrenotheca yuunanensis* Pat.; *M. Pritzelianum* P. Henn.; *M. floridanum* (Eli. et Galw.) Rehm; *M. Uleanum* (P. Henn.) v. Höhn. = *Diplothecea Uleana* P. Henn.; *M. Rhipsalidis* (P. Henn.) v. Höhn. = *Diplothecea Rhipsalidis* P. Henn.]

II. Stroma non carbonaceum, rubrum v. brunneum.

Kusanoa P. Henn. — Sporidia tantum transverse septata, demum colorata. [*K. japonica* P. Henn. et Shir.]

Anhellia Rac. — Sporidia clathrata, demum colorata, Asci sub superficie stromatis unistratosi. [*A. tristis* Rac.]

Uleomyces P. Henn. — Sporidia clathrata, demum colorata. Asci in stromate profunde, irregulariter sparsi. [*U. parasiticus* P. Henn., *U. purpurascens* Rehm].

(*) De anatomia et morphologia Discomycetum confer, inter recentiora, imprimis opera J. LAGARDE, *Contribution à la connaissance des Discomycètes charnus* (Ann. Mycol. IV (1906) pagg. 125-256, 58 fig. et 2 tab., et de systematica: E. BOUDIER, *Histoire et classification des Discomycètes d'Europe*. Paris 1907, et *Icones mycologicae*. Paris 1904-1910, tab. 600 col.

Quod ad genera Myriangiaceis v. affinibus attributa attinet, ecce observationes cl. v. Höhnel, Fragm. zur. Myk. VI.

Myriangium Cinchonæ Rehm est *Arthothelii* species.

Phillipsiella purpurea Ph. et Hark. = *Harknessiella purpurea* (Ph. et H.) Sacc. esset potius vocanda *Coryne purpurea* (Ph. et Harkn.) v. Höhn. l. c. f. 19 inter Bulgariaceas.

Myriangella orbicularis Zimm. est potius *Micropeltis orbicularis* (Zimm.) v. Höhn. vocanda.

Microphyma Rickii Rehm est potius *Microthyrium* (*Microthyriella*) *Rickii* (Rehm) v. Höhn. nuncupandum.

Microphyma Bubakii Rehm est *Melaspilea*, forte *M. populinae* Rehm var.

Saccardia Durantæ Pat. var. *Rickii* Rehm est potius *Saccardinula Rickii* (Rehm) v. Höhn. dicenda.

MollerIELl Epidendri Rehm videtur potius lichen minimus foliicola.

Trichophyma Bunchosiae Rehm, *Patzschkea lichenoides* Rehm, *Puiggariella apiahyna* Speg. et *Melittosporiopsis violacea* Rehm, sunt, teste cl. von Höhnel, ad Lichenes spectantia.

1. ***Myriangium floridanum*** (Ell. et Galw.) Rehm. ap. v. Höhnel in 5267
Sitzgb. k. Akad. Wiss. Wien, CXVIII, Abt. I, (Apr. 1909) p. 354,
Southwertia floridana Ell. et Galw. in herb. Ellis. — Stromatibus solitariis v. crustaceo-aggregatis, globoso-depressis, nigris, vix nitidis, 500-600 μ . diam., carbonaceis, e cellulis 8-10 μ . diam., supra stratum 30 μ . cr., infra stratum basilare sterile 100 μ . cr. formantibus conflatis; ascis irregulariter stratose dispositis, ovato-globosis, 36-48 μ . diam., confertis, octosporis, tenui-tunicatis, pariete cellulari simplici separatis; sporidiis hyalinis, oblongo-clavulatis, 28-32 \times 9-13, saepius 7-septatis et septo longitudinali unico interrupto partitis, saepè curvulis, utrinque rotundatis.

Hab. in ramis Citri Aurantii in Florida, Amer. bor.

2. ***Myriangium Cinchonæ*** Rehm, Ann. Myc. VI (1908) p. 325. — Stromatibus e cortice crasso emergentibus, thallo proprio parentibus, gregariis, orbicularibus vel oblongis, planis, haud marginatis, superficie subverruculosis, atris, 0,5-1 mm. diam., intus hyalino-flavidulis, ceraceo-corneis; ascis immersis, late dispersis et parenchymate cellularum elongatarum magnarum separatis obtectisque, ovalibus, ca. 100 \times 50-70, octosporis pariete 10-12 μ . extus lata.; sporidiis ellipsoideis, utrinque obtusis, interdum subcurvatulis, transverse 11-13-longitudinaliter multoties divisis indeque muriformibus, primus hyalinis, demum olivaceis, 50-60 \times 22-25, irregulariter positis; parenchymate stromatis versus superficiem olivaceo, epithecium latum formante; hypothecio proprio nullo.

Hab. in cortice venali *Cinchona regiae* in India orientali.

3. **Myriangium curreyoideum** (Theiss.) Sacc. et Trott., *Phymatosphaeria* 5269
curreyoidea Theiss., Beih. Botan. Centralbl. Bd. XXVII (1910)
 Abt. II, p. 402. — *Stromatibus nigris dothideaceis, primo immersis rubricosis, dein epidermide fissa erumpentibus brunnescentibus, demum superficialibus, subliberis v. epidermide breviter cinctis, lata basi semper innatis, lenticularibus, 250-350 μ . diam. v. oblongo-ellipticis, c. 300-600 \times 250, interdum confluentibus, intus brunneorubris, extus opacis, atris; strato peripherico textura carbonacea pseudoloculos globosos v. 4-6-angulatos monascos efformante; ascis globosis 24-33 μ . diam. v. ellipsoideis 25-32 \times 20-27, crasse tunicatis, astipitatis, aparaphysatis, octosporis; sporidiis ellipsoideis rectis v. leniter curvulis, utrinque rotundatis v. inferius angustatis, subclavatis, conglobatis, hyalinis, dein flavescentibus, demum brunneis, muriformibus, septis transversis plerumque 3 raro 4-5, longitudinalibus 1-3, ad septa praesertim medio constrictis (quando maturis), 18-22 \times 6-8.*

Hab. in ramulis et foliorum nervis *Compositæ* sublignosæ decumbentis, São Leopoldo Rio Grande do Sul Brasiliæ (RICK).

4. **Myriangium Bambusæ** Rick, Broteria V (1906) p. 39. — *Stromate* 5270
coriaceo-carbonaceo, effuso, tenui; apotheciis (?) inter se liberis, breviter stipitatis, aplanatis v. etiam calyciformibus, majusculis, rugosis, atris, carnosò-lentis, 1-3 mm. diam., aggregatis; ascis primis sphæricis, humefactis cylindricis et tunc usque ad 160 μ . long., 20 μ . latis, membrana tenui, octosporis; sporidiis uni- v. biserialibus 25-50 \times 12-15, hyalinis muricatis, uno septo constrictis et sic facile in duas partes scissis; paraphysisibus non visis.

Hab. in ramis siccis *Bambusæ*, Rio Grande do Sul Brasiliæ.
 — *Habitus exterior Karschiae nigerrimæ. Ob sporidiorum et apothecii (?) characteres vix Myriangium.*

MICROPHYMA Speg. — Syll. VIII p. 844.

1. **Microphyma Bubákii** Rehm, in Bubák Beitr. Pilzfl. Ungar. in Növénytani Közlemények (1907) Heft 4, Extr. p. 19. — *Ascomatibus in maculis albis ad lignum gregarie insidentibus, globosis, 150-160 μ . lat., brunneis, levibus, excipulo tenui parenchymatico, bruneo omnino tectis, basi hyphis longis, septatis, brunneolis, 4-5 μ . cr. cinctis; ascis ovoideis e basi ascomatis inter se subparallelis, apice incrassatis, 50-55 \times 15-18, octosporis, pseudoparaphysisibus gelatinosis, septatis, 3 μ . cr. cinctis, in parietem excipuli desinenti-*

bus; sporidiis distichis, ovoideis, utrinque fortiter rotundatis, medio uniseptatis, loculis 1-2 grosse guttulatis, hyalinis, 12-14 \times 6-7. J. +

Hab. in ligno putri Fraxini Orni, Csernatale prope Herkulesfürdö Hungariæ. — A typo generis differt ascomate seu stroma intus haud distincte loculigero et tunc forte generice distingui potest (*Microphymella* Rehm).

2. **Microphyma Rickii** Rehm, Broteria V (1906) p. 227. — Stromati- 5272 bus hypophyllis, innatis, orbicularibus, convexulis, extus fusco-nigris, haud papillatis, tenuissime scabriusculis, dispersis, 0,3-0,7 mm. diam.; ascis per matricem hyalinam parenchymatice contextam separatis, parallele positis, ovoideis, crasse tunicatis, 60-70 \times 30-35, octosporis; sporidiis fusoideis, utrinque subacutatis, rectis v. curvatus, medio septatis, haud constrictis, granulis minutissimis repletis, hyalinis, 30 \times 7-9, parallele positis; epithecio tenui, fuscidulo, parenchymatico; hypothecio hyalino.

Hab. ad folia Xanthoxyli in Brasilia (Rick). — Dubium an fungus plane evolutus? Extremo peridermii folii strato obiectum stroma, modo colore nigro-fusco sine ullo pororum vestigio conspicuum, ascis autem singulatim dispositis non ad Dothideaceas pertinere potest.

MYXOTHECA Ferdinandi et Winge, Botanisk Tidsskr. XXX (1910) p. 212 (Etym. *myxa* mucus et *theca* h. e. ascus). — Stroma epiphyllum, superficiale, tenue, membranaceum, structura indistincte pseudoparenchymatica, ambitu substrigosum, lacticolor. Ascii in stromate singulatim sparsi, subglobosi, longiuscule stipitati, e centro communi, 7-10(-plures) orientes, membrana gelatinoso-deliquescente, ideoque quasi intra locellos mucosos inclusi, nullo autem strato parietino a stromate cingente limitati; sporidia oblonga, curvula, dense tessellato-muriformia, flava, deliquescentia ascorum et delapsu stromatis liberata. — Genus quoad affinitatem ambiguum, Myriangiaceis, imprimis *Ascomycetellæ*, characteribus nonnullis accedens.

1. **Myxotheca hypocreoides** Ferdinandi et Winge, l. c. p. 212, f. 2. 5273 — Stromatibus in epiphylo hinc inde sparsis, a mycelio intracellulari ortis, plaguliformibus, rotundatis, ad 1 mm. diam., vix $1/_{10}$ mm. altis, ex ascis maturis prominulis luteolis, zonula albida sterili substrigosa cinctis, membranaceis, structura tenuiter et indistincte pseudoparenchymatica; ascis in stromate singulatim sparsis, monostichis v. subdistichis, juvenilibus plerumque profundius

immersis, maturis (stratis cingentibus incremento protrusis) parum supra superficiem stromatis prosilientibus, subglobosis, ovoideo-globosis v. citriformibus, 70-80 ~ 50-70 (membrana gelatinosa excepta), deorsum in stipitem circ. 5 μ . cr. (membrana excepta), longitud. bis-pluries diametrum ascorum superantem transeuntibus; stipitibus singulis seu hyphis ascigeris e cento communi 7-10(-pluribus) egredientibus, evanescentibus; membrana ascorum nec non stipitum mature gelatinoso-deliquescente, indistincte limitatis [qua de causa asci singuli intra locellos gelatinosos inclusi et desuper visi circulo hyalino circumscripti videntur]; sporidiis octonis, conglobatis, e dorso cylindraceo-oblongis, medio turgidulis, e latere curvatis, utrinque rotundatis, medio (intus) ventricosis, tenuiter tunicatis, densissime murali-cellulosis (septis transversalibus fere 20, longitudinalibus minus perspicuis, in fronde qualibet plerumque binis), 64-74 ~ 18-20, maturis flavidulis, deliquescentia ascorum et delapsu stromatis liberatis.

Hab. ad pinnas languescentes *Trichomanes pinnati*, in valle Maravalli dicta insulæ Trinidad (H. LASSEN).

Fam. 2. Saccardiaceæ v. HöHN.

Sec. von Höhn in Sitzb. k. Akad. d. Wiss. Wien, CXVIII, Abt. I, Apr. 1909, pag. 369 hæc nova familiola Discomycetum dígnoscitur ascomatibus superficialibus, marginatis; excipulo tenui, celuloso-parenchymatico; ascis globoso-ellipsoideis, paraphysibus articulatis epithecium tenue formantibus; sporidiis hyalinis v. coloratis; subiculo arachnoideo. Ecce genera:

Saccardia Cooke. — Sporidia clathrata, hyalina [*S. quercina* Cooke].
Dictyonella v. Höhn. — Sporidia clathrata, colorata [*D. erisypoides* (Rehm) v. Höhn. = *Saccardia erysiphoides* Rehm].

Fam. 3. Phillipsielleæ v. HöHN.

In hac familiola cl. v. Höhn., in Sitz. k. Ak. Wien CXVIII, Abt. I, Apr. 1909, p. 85, colligit genera Discomycetum *Phillipsiella* Cooke et *Protasia* Racib. ad Gymnoascaceas nutantia et digno-

scenda: ascomate perexiguo omnino superficiali, immarginato, ascis unistratosis, ovoideo-globosis, hyphis paraphysiformibus multiversis obvallatis, epithecium interruptum laxum formantibus; excipulo nullo.
Huc pertinent:

Phillipsiella Cooke. — *Sporidia* hyalina, bicellularia; ascoma nudum [*Ph. atra* Cooke, *Ph. Puiggarii* (Speg.) v. Höhn. (= *Microphyma* Speg.); *Ph. graminicola* v. Höhn., *Ph. nigella* Ph. et Harkn.]

Protasia Rac. Paras. Alg. und Pilze Javas III, p. 42 (species non indicateæ). —

1. *Phillipsiella graminicola* v. Höhn., Fragm. zur Myk. VI (1909) 5274 p. 85, *Microphyma graminicola* v. Höhnel, Ergeb. Bot. Exp. Südbras. 1901, Denk. k. Ak. d. Wiss. Wien Bd. LXXXIII (1907) Extr. p. 33. — Stromatibus nigris opacis, depressis, tenuibus, sparsis, rotundatis v. elongatis, 200-250 μ ., stratu superficiali laxiusculo atro-brunneo; basi contextu plectenchymatico hyalino fertili; ascis unistratosis, globosis vel ovoideis, crasse tunicatis, 16-20 \times 13-16, octosporis; sporidiis hyalinis v. flavido-viridulis, bilocularibus, elongatis v. subclavulatis, ad septum non constrictis, utrinque rotundatis, loculo super. plerumque parum breviori et latiori, 10-12 \times 3-4.

Hab. in foliis vivis Chusqueæ Wettsteinii, in silvis in districtu urbis Itapecirica, São Paulo Brasiliæ. — *M. Puiggarii* Speg. habitu simillima sed differt ascis minoribus, sporidiis pallidioribus, characteribus stromatis etc.

Fam. 4. Elsinoaceæ v. HÖHN.

Sec. cl. v. Höhnel, Fragm. z. Mykol. VI, p. 98, in Sitzungsb. k. Akad. d. Wiss. CXVIII, Abt. I, Apr. 1909, p. 373, hæc nova familiola Myriangiaceis affinis, dignoscitur ascomatibus matrice innatis, denique, matrice partim destructa, lateraliter liberis, plectenchymate illimitato, carnosulo formatis, ascis inordinate immersis. Genera sunt:

Elsinoë Racib. — *Sporidia* transverse pluriseptata, hyalina [*E. Convallariae* Rac.].
Myriangina P. Henn. (ut subg. *Myriangii*). — *Sporidia* clathrata, hyalina [*M. mirabilis* P. Henn.].

Fam. 5. Cookellaceæ v. HöHN.

In hac familiola nova Discomyctum colligit cl. v. Höhel in Sitzb. k. Akad. d. Wiss. Wien CXVIII, Abt. I, Apr. 1909, p. 354, typos sequentes dignoscendos ascomate disciformi, omnino superficiali, carnosulo-gelatinoso, læte colorato.

A. Asci unistratosi; contextus fibroso-plectenchymaticus inter et supra ascos parum evolutus.

α Contextus inter et supra ascos sæpius omnino obsoletus.

Ascosorus P. H. et R. — Asci clavati; sporidia transverse septata, hyalina [*A. floridanus* (E. et M.) P. Henn. et R.].

β Contextus inter et supra ascos magis evolutus.

Leptophyma Sacc. — Asci breviores; sporidia bicellularia, hyalina [*L. aurantiacum* (E. et M.) Sacc.].

B. Asci pluristratosi; contextus inter et supra ascos copiose evolutus.

Cookella Sacc. — Sporidia clathrata, colorata; contextus fibroso-plectenchymaticus [*Cookella microscopica* Sacc.].

Ascomycetella Ellis ex p. — Sporidia clathrata, hyalina; contextus sub ascis minute celuloso-parenchymaticus, inter et supra ascos plus minus fibroso-plectenchymaticus [*A. sulphurea* (Wint.) Sacc.].

ASCOMYCETELLA Ellis — Syll. VIII p. 846, XIV p. 826, XVIII p. 116.

1. *Ascomycetella sulphurea* Wint. — Syll. VIII, pag. 846. — Huc 5275 videtur spectare *Myriangium flavum* (Wint.) P. Henn. in Hedw. XL (1901) p. 354, fig. 3, nam sub nomine *Asc. flava* Wint. nulla species extare videtur et nomen forte ex lapsu calami cl. Henningsii originem duxit.

COOKELLA Sacc. — Syll. I p. 71, VIII p. 846, XVI p. 802, 1152.

1. *Cookella paulistana* Speg., Fungi Paulist., Rev. Mus. La Plata 5276 t. XV, p. 31 (1908). — Subiculo et maculis nullis; stromatibus lenticularibus atris, glabris, amphigenis, superficialibus, 150-200 μ . diam. coriacellis, intus pulposo-albidis; ascis pulpa immersis, numerosis subpiriformibus 40 \times 30 antice obtusis crasseque tunicatis postice umbonatis; sporidiis congregatis utrinque obtusis, 18-20 \times 9-10, tri-

septatis ad septum medium constrictis, hyalinis; in iisdem stromatibus: loculis pusillis, 50 \times 30, penicillum sporophororum filiformium, 30 \times 1, hyalinorum gerentibus cum sporulis ellipsoideis continuis utrinque acutiusculis 4-5 \times 1,5 chlorinulis farctis.

Hab. ad folia viva Bignoniaceæ cujusdam in dumetis Ipiranga até Cambucy, Brasilia (ÜSTERI).

Fam. 6. Agyriaceæ v. HöHN.

Teste cl. v. Höhn. in Sitzung. k. Akad. d. Wiss. Wien CXVIII, Abt. I, Apr. 1909, p. 362 et 1230, hæc familiola Discomycetum dignoscitur ascomatibus excipulo carentibus, superficialibus, convexis, basi applanatis, carnosso-gelatinosis, hypothecio plerumque atro minute celluloso, valde evoluto; ascis clavatis v. ovoideis, sæpe radiatim dispositis, paraphysibus apice grumosis epithecium coloratum formantibus. Ecce genera sec. v. Höhnel:

Agyrium Fr. — Sporidia 1-cellularia.

Henningsiella Rehm. — Sporidia bicellularia. Paraphyses nullæ. Hic spectant: *Ascomycetella quitensis* Pat., *Asterina Ilicis* Ell.

Lecideopsella v. Höhn. + Sporidia bicellularia. Paraphyses gelatinosæ, reticulatae. Huc spectat *Lec. gelatinosa* v. Höhn.

Agyronella v. Höhn. — Sporidia bicellularia. Paraphyses apice vesiculoso-incrassatae, brunneæ. — Huc spectat *Microthyrium Lagunculariae* Wint.

Mollerella Wint. — Sporidia pluriseptata. Huc spectant *M. mirabilis* Wint. et *M. Lirih* Zimm.

Agyrona v. Höhn. n. gen. — Sporidia clathrata. Huc spectant *Phymatosphaeria Calami* Rac., *Ascomycetella punctoidea* Rehm, *Saccardia atroviridula* Rehm, *Saccardia Durantea* Pat. et Lag.

Agyriopsis Sacc. et Syd. — Sporidia filiformia. Huc spectant *A. Betheli* (E. et Ev.) Sacc. et Syd.

AGYRIUM Fr. — Syll. VIII p. 634, X p. 40, XVI p. 768, XVIII p. 140.

1. **Agyrium chilense** Speg., Fungi Chilenses (1910) p. 128, cum icon. 5277 — Euagyrium; ascomatibus laxe gregariis, primo epidermide tectis dein erumpentibus, pusillis, lenticularibus, succineis, glabris, 100-120 μ . diam.; ascis subclavulatis, deorsum attenuato-pedicellatis, 40-50 \times 4-5, octosporis; paraphysibus filiformibus apice non v. vix incrassatulis cinctis; sporidiis distichis subcylindraceis, utrin-

que obtusiusculis atque minute 1-guttulatis, continuis, hyalinis, parvis, $10-11 \times 2,2-5$.

Hab. in pedunculis siccis subputrescentibus *Lobeliae* Tupæ prope Ciudad de Valdivia Chile, Amer. austr. — Habitus nectrioideus et *Orbiliam* in mentem revocans.

2. *Agyrium rhizomatum* (Nitschke in sched.) Rehm, Ann. Mycol. IV 5278 (1907) p. 535, *Stictis rhizomatum* Nke. (Herb. Fuckel in Herbier Barbey-Boissier). — Stromatibus gregariis, sessilibus, punctiformibus vel elongatis, minutissimis, $0,1-0,12$ mm., fuscidulo-rosaceis, haud marginatis, excipulo carentibus, hymenio in strato cellularum hyalinarum nidulante; ascis cylindraceo-clavatis, apice rotundatis et incrassatis, $120-150 \times 10$, octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, hyalinis, $12-15 \times 4$, transverse mono- v. distichis; paraphysibus filiformibus, $2 \mu.$, ad apicem $2,5 \mu.$ cr., hyalinis; hymenio in toto dilute rosaceo.

Hab. ad rhizomata in Germania? (NITSCHKE). — Species quoad locum systematicum dubia.

3. *Agyrium chartarum* Peyl, Beschreib. einig. neuer Pilze in Lotos VIII (1858) p. 31, t. I, f. 19. — Ascomatibus sessilibus v. brevissime stipitatis, initio globosis denique depresso dein disco collabentibus, roseis dein flavo-roseis, minutissimis, excipulo nullo v. indistincto; ascis tereti-clavatis, fasciculatis, paraphysatis, octosporis; sporidiis monostichis, globosis, hyalinis, levibus.

Hab. in charta putri in calidariis, temp. 18° R. in Bohemia.

AGYRIOPSIS Sacc. et Syd. — Syll. XIV p. 805, XVI p. 775.

1. *Agyriopsis javanica* v. Höhn. Fragm. z. Myk. VIII (1909) in Stzb. 5280 k. Ak. d. Wiss. Wien, CXVIII, Abt. I, p. 1227. — Ascomatibus molli-carnosis, omni no superficialibus, regulariter sparsis, irregulariter rotundatis, late insidentibus, discoideis, usque ad $300 \mu.$ lat. et $70 \mu.$ cr., siccis flavo-brunneis et minute farinaceis, udis magis flavescentibus, subiculo et excipulo destitutis; hypothecio $15-20 \mu.$ cr., pallido indistincte minute celluloso plectenchymatico; ascis copiosis, clavatis supra rotundatis v. vix conoideo-angustatis, crassiuscule tunicatis, basi breviter incrassato-pedicellatis, $44-75 \times 7,5-8$ (plerumque 60×8), octosporis; sporidiis tristichis v. tetristichis, parallelis, hyalinis, supra rotundatis et clavatis usque ad $3 \mu.$ incrassatis, basi sensim attenuatis acutiusculis, sexocularibus, in articulos facile secedentibus, $28-33 \times 3$; paraphysibus filiformi-

bus, 1 μ . cr., supra ramulosis ascos non superantibus; epithecio e velo tenui flavo-brunneo minute granuloso-farinoso constituto. J.-.

Hab. in pagina inferiore foliorum viventium *Paratropiæ* sp. in silvis prope Tjibodas in ins. Java.

LECIDÉOPSELLA v. Höhn. *Fragm. Myk. z. VIII* (1909) in *Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I*, p. 1229 (Etym. dim. a *Lecideopsis*, cui affinis). — Foliicola; ascomata depresse adnata, superficialia, excipulo destituta, tenuia gelatinosa, pallide colorata; asci ovoidei, octospori; sporidia hyalina v. subhyalina, bilocularia; paraphyses gelatinosæ, reticulato-ramosæ, epithecium tenue, pallidum, membranaceum efformantes; hypothecium tenuissimum. J.-.

1. *Lecideopsella gelatinosa* v. Höhn., l. c. p. 1230. — Ascomatibus 5281 hypophyllis, sparsis, superficialibus, omnino adnatis, 400–1000 μ . latis, 40 μ . circ. cr. ad marginem tenuioribus, gelatinosis, griseo-brunneolis; ascis laxiusculis globoso-ovoideis, basi breviter noduloso-stipitatis, octosporis, 32–35 \times 28; paraphysibus tenuissimis, hyalinis; sporidiis parallelis, ovoideo-elongatis, utrinque rotundatis, bilocularibus, loculo superiori breviori et latiori, flavidis, 16 \times 7; hypothecio pallido, minute celluloso plectenchymatico.

Hab. in pagina inferiori foliorum *Paratropiæ* sp. in silvis Tjibodas in ins. Java.

AGYRONELLA v. Höhnel, *Fragm. z. Mykol. VIII* (1909) *Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I*, pag. 1229 (Etym. *Agyrium*, cui affinis). — A *Lecideopsella* von Höhnel differt præcipue paraphysisibus plerumque brunneolis, apice fortiter vesiculoso-incrassatis et epithecium cellulosum efformantibus, hypothecio modice incrassato, obscuro.

1. *Agyronella Lagunculariæ* (Wint.) v. Höhn. l. c. p. 1230, *Microthyrium Lagunculariæ* Wint. — Syll. IX, p. 1058. 5282

HENNINGSIELLA Rehm — Syll. XIV p. 32.

1. *Henningsiella Fairmani* Rehm, *Ann. Mycol. VII* (1909) p. 534. — 5283 Ascomatibus excipulo parentibus, sessilibus, gregariis, orbicularibus, planis dein convexulis, nudo oculo vix visibilibus, 0,1 mm. diam., glabris, albidulis v. cinereis, siccis subochraceis, subgelatinosis; hypothecio hyalino, parenchymatico; ascis saccatis, apice rotundatis, haud incrassatis, c. 60–80 \times 10–15, 8-sporis; jodi ope nulla; sporidiis oblongis v. subclavatis, utrinque rotundatis, rectis, 1-cel-

lularibus, gutta magna centrali instructis, dein medio septatis, haud constrictis, hyalinis, 10-15 × 4-6, 1-2-stichis; paraphysibus filiformibus conglutinatis, epitheciū dilute flavidulum formantibus.

Hab. in ligno putrido in silvis, Lyndonville New York Amer. bor. (FAIRMAN).

Fam. 7. Onygenaceæ Fr.

DENDROSPHÆRA Pat., Bull. Soc. Myc. France XXIII (1907) p. 69

(Etym. *dendron* arbor et *sphaera*). — Humicola; ascoma stipitatum, sursum ramosum apicibus capitato-globulosum, primum floccosum dein denudatum; gleba ceracea dein pulveracea. Asci rotundati v. ovoidei, octospori, evanidi; sporidia simplicia, sphæroidea, fere hyalina. — Gen. *Onygenæ* et *Trichocomæ* proximum.

1. **Dendrosphæra Eberhardtii** Pat., l. c. p. 69. — Stromate stipitiformi 5284 erecto radicato, infra simplici cylindraceo, levi v. sulcato-rugoso 10-15 × 3-6 mm. non carbonaceo, brunneo-rubro basi obscuriore, hyphis confertis gracilibus (3 μ. cr.) flavidis, septatis constituto, supra ramoso, ramis plus minusve elongatis, apice subgloboso-incrassatis, 2-6 mm., primum albis dein flavo-auratis, intus plurilocularibus; ascis globosis v. ovoideis, 30-50 × 20-27 raro uno latere attenuatis, octosporis; sporidiis sphæroideis 8-10 μ. diam., grosse uniguttulatis, primum levibus demum ob incrustationes asperulis v. irregulariter echinulatis.

Hab. ad terram in silva Djirin, alt. 1600 m. Indo-China (EBERHARDT).

Fam. 8. Elaphomycetaceæ TUL.

ELAPHOMYCES Nees — Syll. VIII p. 863, X p. 80; XI p. 441.

1. **Elaphomyces virgatosporus** Hollós, Ann. Mus. Nat. Hung. VI (1908) 5285 p. 318. — Globosus v. compressus, sulcatus v. excavatus, magnitudine nucis avellanæ v. juglandis, mycelio umbrino instructus; velo papillis obtusis vel spinulis truncatis crassis sparso et inæqualiter tecto, asper, carbonaceus, obsoletus, durus, fragilis, sene-scendo rimosus; cortice albido, albo-griseo, velum æquante v. cras-

siore, mox evanido; gleba umbrina; sporidiis globosis, levibus v. asperatis, subtiliter et dense virgatis, brunneis, demum opacis, 16-22 μ ., plerumque 20 μ . diam.

Hab. in fagetis et carpinetis ad Litke Hungariæ.

2. *Elaphomyces plumbeus* Hesse Hypog. II, p. 69, t. 16, fig. 15-18, 5286 t. 21, fig. 58, t. 22, fig. 6. — Ascomate 0,5-1,5 cm. diam., plerumque piriformi; cortice exteriore plumbeo, levi, cortice interiore sordide griseo; gleba (maturitatis tempore) intense brunnea; ascis globosis 4-8-sporis; sporidiis globosis, levibus, flavo-virescentibus, 18-20 μ . diam.; odore fungi ingrato, mucescente.

Hab. ad terram humosam inter Quercus et Fagos in provincia Hessen-Nassau Germaniæ.

3. *Elaphomyces uliginosus* Hesse Hypog. II, p. 67, tab. 22, fig. 8, 5287 28, 30. — Ascomate 2-2,5 cm. diam., strato exteriore intense rubro-brunneo, denique fere nigro, levi, mycelio floccoso griseo-virente involuto; strato interiore spongioso, initio candido, dein griseo; gleba primo albo-floccosa, dein grisea, denique brunneo-variegata tandemque nigricante; ascis breviter pedicellatis, globoso-ovoides; sporidiis globosis, hyalinis dein flavidо-griseis, denique saturate rubro-brunneis, 16-18 μ . diam., levibus.

Hab. ad terram silvaticam inter Fagos in provincia Hessen-Nassau Germaniæ.

Fam. 9. Tuberaceæ

GENEA Vitt. — Syll. VIII p. 873.

1. *Genea vagans* Mattir., Flenco Fung. hypog. Vallombr. p. 1 extr. 5288 (Malp. 1900), Bucholtz in Ann. Mycol. I (1903) pag. 169, t. IV, f. 16-18. — Utplurimum Pisi magnitudine, carbonaceo-atra, glabra, ostiolata, globosa v. irregularis, in utraque facie verrucosa, coma radiciformi mediocri prædita; cavitate interiori simplici v. irregulariter lacunosa; ascis generis, cylindraceis, octosporis; sporidiis ellipsoideis, 31 \times 23. (sine verrucis), verrucis conicis conspicuis, 5,8 \times 4,3, tectis, hyalinis.

Hab. in silva Vallumbrosa Etruriæ sub Abietibus et Fagis (MATTIROLO) in agro Tridentino (BRESADOLA) et sub Populis, Tiliis, Quercubus et Ulmis pr. Mosca Rossiæ. — A *Genea*

hispidula forma sporidiorum ascomatisque glabritie et colore distinguatur. Odor debilis nec peculiaris.

2. *Genea Thwaitesii* (B. et Br.) Petch, Ann. Mycol. V (1907) p. 475. 5289
— Ita vocanda *Hydnocystis Thwaitesii* B. et Br. — Syll. VIII,
p. 877.

MYRMECOCYSTIS Harkn. — Syll. XVI p. 809.

1. *Myrmecocystis cerebriformis* Harkn. — Syll. XVI, p. 809 — Ed. 5290
Fischer, Botan. Ztg. (1908) p. 145, tab. VI, fig. 1-3; *Pseudogenea californica* Ed. Fischer, Ber. deutsch. bot. Ges. XXV (1907)
pag. 372, Fedde Reportorium VII (1909) p. 193. — Irregularis,
gibbosus et sulcatus, basi distincta destitutus, lacuna lobata et si-
nuosa, nonnullis locis ad fungi superficiem aperta instructus; diam.
ad 1 cm.; superficie et lacunæ parietibus cortice pseudoparenchy-
matico, minute verrucoso, cremeo-albo obductis; hymenii disjun-
ctis arcuatis, in interiore fungi lacunam spectantibus; paraphy-
sibus septatis, fasciculatim ascis immixtis, sursum in corticem la-
cunæ interioris transéuntibus; ascis cylindraceo-clavatis, 180-220 ×
35; sporidiis sphæricis, diam. 28-35 µ., episporio crasso, flavescenti,
imperfecte et irregulariter verrucoso v. reticulato instructis (diagn.
sec. FISCHER).

Hab. plane subterranea in arenosis Californiæ. — A *Myrmec-*
Vallisumbrosæ (Bucholtz) Ed. Fischer (syn. *Pseudogenea* Buch.)
differt forma irregulari, hymenii distinctius disjunctis et arcuatis,
sporidiis majoribus.

PSEUDOBALSAMIA Ed. Fischer, Botan. Zeitg. (1908) p. 154; Fedde
Reportorium VII (1909) p. 194 (Etym. *pseudes* falsus et *Balsa-*
mia). — Fungus basi distincta destitutus, cortice pseudoparenchy-
matico obductus; venæ externæ tomento replete v. apicem versus
convergentes v. irregulariter dispositæ nonnullisque locis ad fungi
superficiem apertæ; ascis octospori, elliptico-rotundati, per totam
fungi carnem inordinate inspersi; sporidia ellipsoidea in áscō varie
(non seriatim) disposita, hyalina, levia.

1. *Pseudobalsamia Setchelli* E. Fisch., l. c. tab. VI, fig. 13-13; Fedde 5291
Reportorium VII (1909) p. 194. — Fungus plus minusve regu-
laris, diam. ad 1,5 cm., habitu *Balsamicæ fragiformi* persimilis;
corticis superficie fulvo-badia, verrucis creberrimis stipatis pyra-
midatis et nonnumquam subsulcatis asperata; ascis elliptico-rotun-
datis 50-70 × 25-35; sporidiis hyalinis, levibus, 21-28 × 10-12.

Hab. in terra sub Pinu radiata, Berkeley Californiae (N. L. GARDNER).

TUBER Mich. — Syll. VIII p. 882, X p. 81, XI p. 443, XVI p. 813, XVIII p. 206.

1. **Tuber puberulum** B. et Br. — Syll. VIII, p. 893 — var. **longisporum** Bucholtz, Bull. Soc. Imper. Mat. Moscou (1907) n. 4, p. 453. — Strato peridiali interno hinc inde ex hyphis extrorsum versis intricatis conflato; sporidiis longioribus.

Hab. ad terram, Krjukowo prope Nikolaibahn, Rossia.

2. **Tuber michailowskjanum** Bucholtz, Bull. Soc. Imper. Nat. Moscou (1907) n. 4, pag. 457. Ita vocandum *Tuber puberulum* B. et Br. var. *michailowskjanum* Buch. — Syll. XVIII, pag. 206. — Sec. cl. Bucholtz in l. c. pag. 459 haec varietates distinguendæ sunt:
 a. **microreticulatum** Buch. l. c., areolato sporarum minuta; areolæ trans lucem non minus quam 4-5 visibles. — Ad terram Senjkino et Krjukowo, Moskau Rossia. — b. **medioreticulatum** Buch., l. c.: areolatio sporarum magnitudine media; areolæ trans lucem 3-4. — In silvis Gratschewniki, Pljeskowo, Krasnaja Pachra, Senjkino etc. Rossia. — c. **macroreticulatum** Buch., l. c. pag. 460, Syn. *T. ferrugineum* Vitt. var. *balsamoides* Buch., Syll. XVIII, p. 207: areolatio sporarum conspicua; areolæ trans lucem 2, raro ultra, visibles. — In Rossia compluribus locis.

3. **Tuber sinuosum** Lázaro é Ibiza, Rev. Ac. de Ciencias Exact. Fis. y. Nat. Madrid (1908) Extr. pag. 15, tab. I, fig. 9-12, tab. III, fig. 32-34. — Ascomatibus subglobosis sed variabilibus, irregulariter mamillatis, duris, sulcatis, 4-7 cm. latis; superficie inæquali sed levi, opaca, papillis v. reticulis destituta, colore etiam variabili ex subochraceo rubescente; carne alba venis tenuibus undulatis griseis prædicta; ascis subovoideis v. piriformibus, irregularibus, 7-v. 8-sporis; sporidiis sphæroideis breviter echinulatis.

Hab. ad terram, Villanueva del Fresno prope Badajoz Hispania. — Edule; sapore ed odore forti grato.

4. **Tuber lutescens** Lázaro é Ibiza, Rev. Ac. de Ciencias Exact. Fis. y. Nat. Madrid (1908) Extr. p. 13, tab. I, fig. 5-8, tab. III, f. 29-31. — Ascomate tuberoso subgloboso, irregulari, 3-5 cm. lato, superficie undulata v. submamillata, hinc inde subsulcata, levi, roseo-ochracea; carne alba et primum amorpha dein venis griseis undulatis divisa, cortice tenui 0,25-0,50 mm. cr.; ascis ellipsoideis

irregularibus, tenuissime tunicatis, plerumque octosporis; sporidiis sphæroideis, echinatis.

Hab. in Hispania plerumque centrali compluribus locis: — E dule; odore et sapore tenui; a *T. rufa* et *nitida* diversum.

5. *Tuber pallidum* Lázaro é Ibiza, Rev. Ac. de Ciencias Exact. Fis. 5296 y Nat. Madrid (1908) Extr. p. 10, tab. I, fig. 1-4, tab. III, f. 23-28. — Ascomate tuberiformi, transverse subellipsoideo, 2-3 cm. alto, 2-4 cm. lato, sæpe irregulari v. asymmetrico; superficie palea ex alutaceo brunnea levi, subæquali; carne primum alba dein grisea; ascis ovoideis, irregularibus, plerumque octosporis; sporidiis sphæroideis, griseolis, echinulatis, spinulis acutis laxiusculis longis.

Hab. in Hispaniæ, imprimis centr. et septentrionalis compluribus locis. — Edule; verisimiliter parasiticum *Helianthemi* (*Tuberariae*) variabilis.

6. *Tuber Lyoni* Butters, Botan. Gaz. XXXV (1903) pag. 431, cum 5297 icon. — Ascomatibus globosis v. irregulariter ellipticis, 0,5-2 cm. diam., uno latere longitudinaliter excavatis, glabris, lète castaneis, demum minute areolatis et nigris, peridio subtenui, cartilagineo; gleba violaceo-brunnea, carnosa sed granulosa; septis peridii numerosis anastomosantibus, labyrinthiformibus, translucidis; venis externis albis, conspicuis, extus secus sulcos apertis; ascis pedicellatis, 1-5- plerumque 4-sporis; sporidiis ellipsoideis, acute echinulatis, 25-48 \times 15-31.

Hab. sub Tiliis prope Minneapolis Minn. Amer. bor.

7. *Tuber rapæodorum* Tul. — Syll. VIII, p. 890 — var. *Klotzschii* 5298 P. Henn., Kryptog. Fl. v. Brandenb. (1905) p. 156, p. 159, f. III. — Ascomate subgloboso-nodoso, plicato-foveolato, 0,5-1,5 cm. d.; ascis ovoideis v. late clavatis, sæpe petiolatis, 65-90 \times 45-65, 2-4-sporis; sporidiis ellipsoideis, 25-38 \times 20-25; membrana brunnea, reticulata.

Hab. ad terram humosam sub *Aesculo Hippocastano*, Schöneberg prope Berolinum Germaniæ (KLOTZSCH).

8. *Tuber argentinum* Speg. — Syll. VIII, p. 893 — var. *Andarum* 5299 Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 423. — Ascomate plus minusve profunde delitescenti, 5-15 cm. prof., candido sed tacto mox sordide rufescenti, odore saporeque fungino (non aliaceo) dulci sat intenso ac grato donato.

Hab. abunde in dunis inter radices *Discariæ* longissimæ prope Adolfo Alsina, Pampa Centrali, Argentina America austr.

HYDNOBOLITES Tul. — Syll. VIII p. 879.

1. **Hydnobolites javanicus** v. Höhnel, Sitzb. k. Ak. d. Wiss. Wien 5300 CXVII (1908) Abt. I, p. 1020. — Hypogæus, irregulariter tuberosus, depresso verrucoso-pustulatus, extus flavidus, intus pallidior, 13 mm. latus, 10 mm. altus, opacus, subvelutinus; carne molli, venis sterilibus nullis, ex hyphis hyalinis, 10-12 μ . latis, regulariter tenuiterque tunicatis constituta; ascis numerosis, arcte gregariis, elongato-clavatis, 120 \times 60, 1-3-sporis; sporidiis globosis, pallide griseo-brunneolis, 26-32 μ . diam., tunica dupliqui 1,5-2, μ . cr., aculeis 4 μ . long.; peridio tenui parum dissimili, ex hyphis flavidis, crebre septatis apice subclavatis, usque ad 16 μ . lat. constituto.

Hab. ad terram in silva primæva Tjibodas in ins. Java.

2. **Hydnobolites californicus** Ed. Fischer, Fedde Repertorium VII 5301 (1909) p. 194. — Tuberosus, plus minusve gibberosus, poris rimisque apertus, basi distincta destitutus; superficie pseudoparenchymatica, primum albida, demum subfuliginea; gleba interna albida v. griseo-albida, canaliculis labyrinthicis ad superficiem fungi hiantibus pertusa; ascis per totam fungi carnem inordinate inspersis, ellipsoideis c. 80-100 \times 50-70; sporidiis globosis, 14-17 μ . cr.; episporio flavescenti reticulo instructo, angulis in aculeos 2-3 μ . long. protractis.

Hab. ad terram in California America bor.

TERFEZIA Tul. — Syll. VIII p. 902, XI p. 445, XIV p. 826, XVI p. 812, XVIII p. 205.

1. **Terfezia hispanica** Lázaro é Ibiza, Rev. Ac. de Ciencias Exact. 5302 Fis. y Nat. Madrid (1908) Extr. p. 17, tab. II, fig. 13-22, t. IV, fig. 35-39. — Ascomatibus tuberiformibus forma et magnitudine variabilibus, subglobosis, subellipsoideis v. subcordatis, basi sæpe in pedicellum crassum usque ad 2 cm. long. productis, a 2,5 usque ad 10 cm. lat., superficie rubro-ochraceo-brunnea, hinc inde pallescenti, opaca, cortice parum distincto; carne roseola rubro-maculata; ascis ellipsoideis irregularibus, pressione subpolygoniis.

Hab. in Hispania fere tota et verisimiliter etiam in Lusitania. — Edulis; odore et sapore characteristico nullo. — A *T. Leonis* et *T. rosea* Torr. distincta. — Var. *turbinata* Lázaro é Ibiza, l. c, p. 21. — A typodiffert basi cuneata v. etiam subpedicellata. — Cum typo in Hispania.

2. **Terfezia Metaxasi** Chat. La Truffe p. 78. t. XIII, f. 2. — Asco- 5303

matibus globoso-depressis, basi breviter et obtuse acutatis, levibus, e griseo flavidis, gleba homogenea, flavicante; ascis globosis, plurumque 6-sporis (numquam 8-sporis); sporidiis 30-32 μ . diam., sordide flavidis, spinulis seu verrucis cylindraceis apice truncatis dense tectis, intermixtis tenuioribus.

Hab. in arenosis, Bagdad in Mesopotamia forte ad Cistos (METAXAS). — Vulgo *Kamé* (niger).

3. *Terfezia Boudieri* Chat. — Syll. XI, p. 445 — var. *Auzepii* Chat. 5804 Bull. Soc. Bot. Fr. (1893) p. 303. — A typo imprimis dignoscitur sporidiorum verrucis depressis sed multo latioribus, qua nota congruit cum var. *arabica Terfeziæ Boudieri*, quæ vero sporidiis gaudet majoribus (26-30 μ . diam.) nec tantum 20-25 ut in typo et in var. *Auzepii*.

Hab. ad terram peope Chonca in Caucaso (AUZEPPI). — Vulgo *Touboulane*.

4. *Terfezia Pinoyi* R. Maire, Not. myc., Ann. Myc. vol. IV (1906) 5805 p. 332 et Bull. Soc. Myc. Fr. LIV (1907) p. CXCV. — Ascomate subgloboso vel complanato, stipite nullo vel subnullo, extus ex albido sordide lutescente; pellicula tenui, levi, saepius tessellato-rimosa; gleba alba, venis concoloribus raris; ascis ovoideis, octosporis, stipite longiusculo, rarius subnullo praeditis, 80-140 (ped. incl.) \times 52-70; pedicello 5-6.5 \times 8-12; sporidiis globosis, hyalinis, episporio tenui, subtilissime verruculoso vel reticulato, rugoso, 16-19 μ . diam., grosse guttulatis.

Hab. ad radices *Plumbaginis* albicantis in argilloso-sabulosis Sidi-Khalifa pr. Kreider Algeriae. — Habitus glebae fere *Tirmaniae* sed sporidia globosa et basis sterilis nulla.

5. *Terfezia Deflersii* Patouill., Journ. de Bot. VIII (1894) p. 154. — 5806 Nigra quandoque rubescens; cute crassa, 1-1.5 mm.; carne rubra albo-venata; sporidiis sphæroideis, hyalinis, 20-25 μ . diam., verrucis latis truncatis nonnullis minoribus immixtis.

Hab. ad terram prope *Helianthemum Lipsii*, El Arysch Tunisia (DEFLERS). — *T. Metaxasi* affinis sed differt cute crassiori et sporis minoribus; a *T. Leonis* colore et magnitudine.

6. *Terfezia rosea* (Tul.) Torrend in Bull. Soc. port. Sc. nat. I (1908) 5807 pag. 180. Sub hoc genere adnumeranda esset *Delastria rosea* Tul. — Syll. VIII, p. 905 — teste cl. Torrend l. c.

DELASTREOPSIS Mattiolo, Bol. Soc. Brot. XXI (1905) p. 10 [extr.] (Etym. *Delastrea*, cui affinis). — Peridium pseudo-parenchymati-

cum. Ascæ oblongi, pedicellati, parietibus crassis prædicti, 1-3 raro 4 sporidia foventes. Sporidia areolato-reticulata muricata. Characteribus variis tam ad *Delastriam* quam ad *Terfeziæ* et *Tuber* nutat.

1. *Delastreopsis oligosperma* (Tul.) Matt. Bol. Soc. Brot. XXI (1905) 5308 p. 10. Ita vocanda est *Terfezia oligosperma* Tul. — Syll. VIII, p. 904.

Fam. 10. Endogonaceæ

SPHÆROCREAS Sacc. et Ellis, Michelia II, p. 582. Cfr. Syll. IV, p. 648 (non = *Stigmatella*, teste v. Höhnel). Ad hoc genus referendæ sunt species sequentes sec. cl. v. Höhn. in Sitzungsb. d. k. Akad. d. Wissensch. Wien, CXVIII. Abt. I, Apr. 1909, p. 401: *Sphærocreas pubescens* Sacc. et Ell.; *Sph. Dussi* (Pat.) v. Höhn. (*Ackermannia Dussi* Pat.); *Sph. coccogenum* (Pat.) v. Höhn (*Acker-mannia coccogena* Pat.); et sequens *Sph. javanicum* v. Höhn.

1. *Sphærocreas javanicum* v. Höhnel, Sitzb. k. Ak. d. Wiss. Wien 5309 Bd. CXVII (1908) Abt. I, p. 104, fig. 1. — Ascomatibus globosis, duriusculis, opacis, e sordide flavis griseo-viridibus, 500-600 μ . d., apice verruca conica 150-200 μ . lata et alta auctis, saepe vertice iterum corpusculo sphæroideo addito; contextu hyphenchymatico ex hyphis 4-8 μ . cr., septatis, hinc inde laxiusculis constituto, peripherice in ascis ex ovoideo elongatos 60-90 \times 20-50 inflatis; ascis nonnullis minute granuloso-farctis; sporidiis genuinis non visis.

Hab. ad terram inter ligna ramulosque putrescentes, in Horto bot. Buitenzorg in ins. Java.

Dubiaæ sedis.

BYSSOCHLAMYS Westl. in Svensk Bol. Tidskrift II, 2 (1909) p. 134 (Etym. *byssus* et *chlamys* pro chlamydospora). — Mycelium floccosum niveum, repens, hyphis plurinucleatis. Ascoma nullum. Ascæ nudi, subsessiles, conglomerati, octospori. Chlamydosporæ in apice hypharum tantum formatæ. Conidia catenata (fere *Oospore*) conidiophoris brevibus plerumque simplicibus. — Genus inter Endogonaceas et Gymnoascaceas fere medium.

1. *Byssochlamys nivea* Westl., l. c. tab. 4. — Hyphis septatis, ra- 5310

mosis tenuibus, hyalinis 2-5 μ . cr., levibus, sinuos; ascis subgloboso-ovoideis, 6-16 \times 5-12; sporidiis ovoideis, levibus, 3,5-5 \times 3-4; chlamydosporis piriformibus, 5-12 \times 4-10, tunica crassa, levi, primo hyalina, dein subfuscata; conidiis levibus, ovoides, 3-7 \times 3-6,5.

Hab. in peridio *Geasteris coronati* et in nonnullis herbis spiritu conservatis et deinde lente exsiccatis in Suecia.

Fam. 11. Helvellaceæ

Subfam. 1. Morchelleæ.

Sect. 1. Hyalosporæ.

MORCHELLA Dill. — Syll. VIII p. 8, X p. 1, XI p. 391, XIV p. 738, XVI p. 695, XVIII p. 2.

1. **Morchella patagonica** Speg. Myc. Argent. IV, An. Mus. Nac. Buenos Aires t. XIX (1909) p. 442. — Ascomatibus ovoideis dense grosso-que costato-reticulatis, isabellinis, intus vacuis, abrupte pedicello albescente 10-15 mm. alto, 5-6 mm. cr., levi, fistuloso impositis, 15-20 mm. long., 10-15 mm. cr., costis numerosis gyroso-reticulatis sat elevatis; ascis clavatis, apice rotundatis 140-150 \times 20, apophysatis; sporidiis ellipsoideis, octonis, 15-17 \times 10-11, minute 2-guttatis, levibus, hyalinis, in ascis parte sup. oblique distichis v. subconglobatis.

Hab. ad terram muscosam, inter folia delapsa, Puerto Blest, Nahuel-Huapi, Argentina. — Jodi ope ascorum tunica tota cærulescit.

2. **Morchella costata** (Venterat) Pers., Myc. Europ. I, p. 208, Bres., 5312 Fungi Trid. II, p. 42, t. 148, Vittadini, Funghi t. XIII, f. VI-VII, *Phallus costatus* Vent., Diss. Phall. p. 510 (1798). — Ascomate obovato-conico v. pyramidato, apice obtuso, saepe quadrangulari-compresso, basi adnato, glabro, intus cavo alboque tomentoso, saturate olivaceo v. olivaceo-fuligineo, 7-12 cm. longo, 4-5,5 cm. lato, costis longitudinalibus elevatis, puberulis, raro anastomosantibus, sed rugis transversalibus junctis et areolas rhomboe-diformes efformantibus, saturati coloratis; stipite cavo, albo, fragili, furfuraceo-floccoso, rugoso, basi bulboso-lacunoso, 4-5 cm. longo, apice 1-1,5 cm., basi 2-3 cm. crasso; carne alba, odore et sapore

gratis; ascis cylindraceis, basi flexuoso-stipitatis, jodo non v. leviter obturaculo cœruleo-tinctis; paraphysibus septatis, ramosis apice clavato et 8-10 p. cr.; sporidiis ellipsoideis, hyalinis, 18-22 \times 12, membrana interna aurea.

Hab. in hortis Trento, alibique in Italia et Gallia.

3. **Morchella esculenta** (L.) Pers. — Syll. VIII, p. 8 — var. *lutescens* 5313 (Leuba) Sacc. et Trott., *M. lutescens* Leuba, Champ. comest. p. 89, tab. 44, fig. 1-4. — Solitaria; ascomate ovato-oblongo subconico, membranaceo, subcartilagineo, fragili, superne callose reticulato, luteo, intus cavo, subtus clauso; stipite curto, crasso, fistuloso, albido, basi crassiore, nudo; carne fragili, sapore grato.

Hab. ad terram campestrem, in vineis, vallis in Helvetia, Germania, Italia, vulgaris. — Non diversa verisimiliter a typo vulgari *M. esculentæ*. — Var. *abietina* (Leuba) Sacc. et Trott. *M. abietina* Leuba, Champ. comest. p. 89, t. 44, f. 5-7. — Pileo medio ex albo griseo-fulvo, ovato, subconico, stipiti basi adnato, areolis rhombeis irregularibus, minutis dein ampliatis. — In graminosis montanis sub *Abietibus*, frequens, gratissime edulis. — Cl. Leuba, l. c. p. 91-92, breviter describit (sine figuris) sp. novas sequentes: *M. radicosa*, *M. pratensis*, *M. canina*, *M. alba* (= *M. vulgaris* a. *albida* Boud.), *M. autumnalis*, quæ verisimiliter sunt meræ formæ *M. esculentæ*, *M. conicae*, *M. costatae*.

4. **Morchella rigida** (Krombh.) Boud., Bull. Soc. Mycol. Fr. (1897) 5314 pag. 137, *M. conica* var. *rigida* Krombh. Abbild. der Schwämme III, p. 10, t. XVI, f. 13 et t. XVII, f. 1-2. — Media, 7-15 cm. alta, ascomate omnino adnato, conico dein oblongo, flavo-ochraceo, ut in *M. rotunda* sed magis elongato alveolisque longioribus, minus rotundatis, subseriatis, minus profundis, sepimentisque tenuioribus; sporidiis paullo crassioribus, 20-24 \times 13-14; stipite albido basi in-crassatulo.

Hab. ad terram in Gallia, Italia, Bohemia.

5. **Morchella rotunda** Fr. — Syll. VIII, p. 9 (ut var.) — var. *alba* 5315 Mérat., Fl. paris. I, p. 233. — Ascomate toto albo, senio flavi-cante dignoscitur.

Hab. ad terram in Gallia.

6. **Morchella deliciosa** Fr. — Syll. VIII, p. 10 — var. *elegans* Boud. 5316 Bull. Soc. Mycol. Fr. (1897) p. 144, *M. conica* Krombh. t. XVI, f. 9 et Barla Champ. Nice, tab. 42, f. 10, non Auct. — Multo elatior, 10-20 cm. alta; stipite grosse furfuraceo; alveolis majoribus et magis irregularibus.

Hab. ad terram Nicææ (Nizza) et Chartres Galliæ, rarer.

7. *Morchella elata* Fr. — Syll. VIII, p. 10. — var. *Clusii* Istv., in 5317
Clus. Ic. fung. p. 55, t. IV, f. 2. — Ascomate apice minus acuto
et subrufescente.

Hab. in Pannonia. — Var. *purpurascens* Boud., Disc. d' Eur.
p. 32, Krombh. Abbild. und Beschr., fasc. III, t. XVI, f. 24 (*M.
elata*). — Vix ascomatis colore magis purpurascente dignoscenda.
— In Bohemia et Gallia.

HELVELLA L. — Syll. VIII p. 17, XI p. 391, XIV p. 740, XVI
p. 697, XVIII p. 3.

1. *Helvella lactea* Boud., Icon. Myc. t. II, pl. 226 (1906) Hist. et 5318
Classif. Discomyc. Europe (1907) p. 36. — Media, 4-6 cm. alta,
tota alba, lactea; ascomate trilobato, subtus glabro, concolori; sti-
pite ad basim paululo incrassato, sulcato, costis parallelis raro a-
nastomosantibus, sat regularibus; ascis octosporis, cylindraceis, ad
basim attenuatis, 250-280 \times 13-14; paraphysibus septatis, ad basim
divisis, ad apicem vix incrassatis, 6-7 μ . long.; sporidiis ellipso-
deis, albis, intus guttula oleosa media, crassa, raro granulis comi-
tantibus repletis, 16-17 \times 10-11.

Hab. ad terram argillaceam in silvis Blois et Meaux Galliæ. —
Ab *Helv. crispa* differt statura minori, colore, stipite magis regu-
lariter cylindraceo, sporidiis minoribus.

2. *Helvella sulcata* Afz. — Syll. VIII, p. 20 — var. *pallidipes* Boud., 5319
Hist. et Classif. Discomyc. Europe (1907) p. 35. — A typo differt
statura minori et stipite albo v. albescente.

Hab. in Gallia præcipue meridionali.

3. *Helvella constricta* Boud., Hist. et Classif. Discom. Europe (1907) 5320
p. 36. — Minor, 3-5 cm. alta; ascomate bi- v. trilobo, nigro-ci-
nereo-fusco, minus anguloso; stipite sulcato albido vel albido-
cinereo.

Hab. ad terram pr. Niceam (Nizza). — *Helv. sulcata* affinis
a qua præcipue differt sporidiis majoribus, ascomate minus expanso.

4. *Helvella Queletiana* Sacc. et Trav. — Syll. XIX, p. 850. — Ita 5321
vocetur *Helvella phlebophora* Sacc. — Syll. VIII, p. 20 [= *H.
venosa* Quél.], non Pat. et Doass.

5. *Helvella Cookeana* (Boud.) Sacc. et Trav. — Syll. XIX, p. 844 — 5322
Leptopodia Cookeana Boud., Icon. Mycolog. t. II, pl. 236, Hist. et
Class. Discom. Europe pag. 37 (1907), *Helvella ephippium* Cooke

Mycogr. n. 169, non Lév. — Media, robustior, pileo bi- aut trilobo, subtus et stipite brunneo-fulvis, villosis, hymenio saturatiore; ascis elongatis cylindraceis, octosporis, 380-400 × 18-20; paraphysibus ad apicem paululum incrassatis, 5-8 µ. spissis, fuligineis; sporidiis ellipsoideis intus guttula oleosa magna et guttulis minoribus repletis, 22-25 × 9-10; ascomatis pilis exterioribus septatis, fuligineis, 100-150 × 10.

Hab. ad terram argillaceam loco? — Ab *Helv. ephippio* statura majore, colore obscuriore, pubescentia magis distincta diversa.

6. *Helvella murina* (Boud.) Sacc. et Trav. — Syll. XIX, p. 849 — 5323
Leptopodia murina Boud., Icon. Mycol. pl. 481, Hist. et Class. Discom. Europe pag. 37 (1907). — Media, 2-5 cm. alta, tota cinerea, subtus cum stipite villosulo, hymenio concolor; ascomate bilobo, deflexo; stipite pleno, elongato, ad summam basim tantum pallido et saxe sulcato; ascis clavatis, octosporis, ad basim paululum attenuatis, 360-370 × 24-30; paraphysibus simplicibus aut inferne tantum divisis, sub lente composita hyalinis, ad apicem clavulatis, 5-10 µ. spissis; sporidiis ellipsoideis, intus guttula magna media lutescente et guttulis minutis numerosis, ad apices positis repletis, 21-22 × 12-13.

Hab. ad terram argillaceam in silva Carnelle, Gallia. — *Helv. ephippio* affinis, a qua differt statum majori, colore uniformiter griseo, hymenio concolori, non fusco sporidiisque. — Var. *Huyotii* Boud., l. c. pag. 38. — A typo recedit stipite breviori, 2-3 cm. longo, ascomate majori usque ad 3 cm. lato, minus pezizoideo magis helvellaceo, extus pallidiore, fere glabro; stipite pubescenti, hymenio concolori; sporidiis minoribus 18-20 × 10-12; paraphysibus minus clavulatis apice tantum subincrassatis. — Prope Lagny (Seine-et-Marne) Gallia (M. Huyot).

7. *Helvella tremellosa* Krombh., Abbild. und Beschreib. fasc. III, 5324 pag. 31, t. XXI, fig. 7-8, ? *H. tremelloides* Hazsl. Rend. Kögg. t. III, f. 4. — Ascomate lobato, irregulari, fulvo-fusco, lobis irregulariter deflexis, connatis, undulatis; costis primariis magnis, angulatis, rotundatis, secundariis minutis gyrosis, planiusculis; areolis irregularibus, profundis, celluliformibus v. planiusculis, fundo inaequali, lacunoso-costato, pallido; stipite irregulari, confluenti, albo, tremelloso-ceraceo, fragili, subfarcto, dein cavo, ramoso; ramis irregularibus, subcompressis, subasperis; mycelio tenui, albo.

Hab. ad terram in silva densa pr. Bukowan Bohemiæ.

Helvellæ species incertæ sequentes enumerantur in Syll. XIX, p. 851:
Helvelia bicolor Raddi — *H. inflata* Cumino — *H. reflexa* Cumino
— *H. tomentosa* Raddi — *H. undulata* Raddi.

VERPA Sw. — Syll. VIII p. 29, XIV p. 741, XVIII p. 6.

1. **Verpa perpusilla** Rehm, Ann. Mycol. VII (1909) p. 526, Ascom. 5925
Exsicc. fasc. 45, n. 1857. — Ascomatibus gregariis, e mycelio albo subterraneo exortis, erectis, stipitatis, obtuse campanuliformibus, apice sæpe impressis, acute haud involute marginatis, haud corrugatis, extus subfuscis, 0,5-1 cm. alt., 2 cm. lat.; subtus cum stipite in medio inserto, plus minusve cylindrico, 3 mm., versus basim 5 mm. lat., ibique subcompresso, solido, glabro, 1,5-5 cm. alto, flavide albidis; ascis cylindraceis, apice rotundatis, c. 200 \times 14, 8-sporis; sporidiis ellipsoideis, utrinque obtusis, 1-cellularibus cum gutta magna oleosa centrali, hyalinis, 15-20 \times 9-10, monostichis; paraphysibus filiformibus, 3 μ . cr., versus apicem sensim usque ad 8 μ . lat., hyalinis.

Hab. inter Larices et Abietes, Blaniks Goods Algoma Wisc. America bor. (DODGE).

UNDERWOODIA Peck — Syll. X p. 1.

1. **Underwoodia Campbelli** Sacc., Ann. Mycol. VII (1909) p. 438. — 5926
Magna, fasciculata, albo-lactea, carnosa, sparassoides, ex laminis varie inflexis et longitrorsum connexis (ad instar stipitis *Helvellæ lacunosæ*) formata, hinc lacunoso-costata, ubique ascigera; hymenio 1 mm. cr., strato subhymeniali celluloso modo crassiusculo modo tenuissimo; ascis cylindricis longissimis, 270-320 \times 7-8, p. sporifera 70-80 μ . longa, apice obtusis, operculatis, deorsum leniter tenuatis, octosporis; paraphysibus bacillaribus, apice vix in-crassatis, pluriguttulatis, hyalinis; sporidiis oblique monostichis, ellipsoideis, 11-12 \times 5,5-6, vix asperulis, intus granulosis, hyalinis.

Hab. in areis carbonariis derelictis, probabiliter ex fragmentis ligneis infossis enascens in silvis fagineis prope Sora (Caserta) Junio 1909 (Prof. C. CAMPBELL). — Cæspites usque ad 15-18 cm. crassi. Ascii in hymenio non semper parallele stipati, sed sæpius in fasciculos distinctos suborbiculares juncti. Tam hæc species quam typica (*A. columnaris* Peck) videntur paradoxa; scilicet *Helvellæ* v. *Gyromitræ* species ascomate orbatae, stipitibus vero maxime evolutis confluentibusque; mirum vero stipites hos (revera pseudostipites!) omnino et ubique superficialiter ascigeros esse!

Subfam. 2. Geoglossæ ()*.*Sect. Hyalosporæ.*

MITRULA Fr. — Syll. VIII p. 32, X p. 1, XI p. 392, XIV p. 741, XVI p. 697, XVIII p. 6.

1. **Mitrula phalloides** (Bull.) Chev. — Syll. VIII, p. 33 — var. ⁵⁸²⁷ *aurantiaca* (Cumino) Boud. Ic. Mycol. III, pl. 427 bis (1909) *Helvelia aurantiaca* Cum., Fung. Vall. Pisii in Act. Acad. Taur. (1805) p. 221, *Leotia uliginosa* var. *aurantiaca* (Cum.) Pers. Myc. Europ. I, p. 201. — Ascomate exiguus, convexo, aurantiaco, carnosus-gelatinosus, stipite albo-rubescens, fistulosus.

Hab. in truncis et ramis putridis in rivulis, Pesio Pedemontii et in Gallia.

MICROGLOSSUM Sacc. — Syll. VIII p. 39, X p. 2, XI p. 392, XIV p. 742, XVI p. 698, XVIII p. 6.

1. **Microglossum fuscum-rubens** Boud., Icon. Mycol. t. III, pl. 426 (1909), Hist. et Classif. Discomyc. Europe (1907) p. 87. — Elatum, 7-9 cm. altum, fulvo-olivaceum, pediculo ad basim saturatiore fulvo-rubiginoso; clavula elongata, medio sulcata ad apicem attenuata, a stipite bene limitata; pediculo clavula breviore; ascis parvis, octosporis, claviformibus, 100-130 \times 10-12; paraphysibus linearibus ad apicem clavulatis, sub lente composita hyalinis, simplicibus aut ad basim divisitis, 3-5 μ . cr.; sporidiis oblongo-fusoides, albis, intus 4-6-guttulis oleosis granulis comitantibus repletis, non septatis, 20-21 \times 4-4,5; carne ochracea.

Hab. ad terram argillaceam in silvis prope Montmorency Gallois. — *M. lutescens* affinis sed differt colore ferrugineo, clavula longiore, paraphysibus minus clavatis etc.

2. **Microglossum longisporum** Durand, Ann. Mycol. VI (1908) p. 409, fig. 17-18, 206-206 a. — Ascomatibus gregariis, clavatis, multi-formibus, 3-6 cm. altis; clavula oblonga v. elliptica, obtusa, compressa, saepe sulcata, cinnamomeo-umbrina, 1-2,5 cm. long., 4-10 mm. lata; stipite tereti squamuoso, saepe denique glabro nitente,

(*) De hac subfam. cfr. monographiam A. J. DURAND, *The Geoglossaceæ of North America*, in Ann. Mycol. vol. VI (1908) pp. 387-477, cum 222 fig.

cinnamomeo æquali, 2-4 cm. longo, 2-4 mm. lato; ascis cylindro-clavatis, apice rotundatis, poro J. cærulescente, 100-140 \times 12-15, octosporis; sporidiis biformibus, duobus longis, parallele positis, levibus, cylindraceis, demum 14-16-septatis, 60-100 \times 4-5, sex brevibus similibus, continuis, ad apicem asci irregulariter positis, 12-18 \times 3; paraphysibus filiformibus, 2 μ . cr., hyalinis, sursum leviter incrassatis, fortiter curvatis.

Hab. ad terram herbosam, New York, North Carolina, Michigan Amer. bor. — Ob bina sporidia septata et sena continua species ambigit inter *Microglossum* et *Leptoglossum*.

NEOLECTA Speg. — Syll. VIII p. 40.

1. *Neolecta aurantiaca* Feltg., Vorst. Pilzfl. Luxembg. Nachtr. IV 5330 (1905) p. 11. — *Fungus omnino immaturus. Est potius Clavaria* sp. ex ipso Auctore, confirmante cl. v. Höhnel.

CUDONIELLA Sacc. — Syll. VIII p. 41, XI p. 392, XVI p. 698, XVIII p. 7.

1. *Cudoniella Allenii* A. L. Smith, Trans. Brit. Mycol. Soc. 1907, 5331 v. III (1908) p. 40, tab. I, fig. 10 a-d. — Sparsa v. subgregaria, minuta, circ. 2 mm. alt., 1,5-2 mm. lata, æruginea; ascomate cereo, convexo, subtus concavo, levi; stipite brevi, externe subochraceo v. subærugineo, interne hyalino-ochraceo; ascis oblongo-clavatis, versus basim attenuatis, 100 \times 8; sporidiis oblongis leniter curvatis, continuis dein pluri- plerumque 6-septatis v. pseudo-septatis, 17 \times 3, subærugineis dein hyalinis; paraphysibus filiformibus ramosis, ad apicem minute globosis 2,5 μ . diam.; disco et hymenio colore ærugineo suffuso.

Hab. ad ligna vetusta, Shropshire, Britannia (W. B. ALLEN).

2. *Cudoniella coniocystoides* Rehm, Ann. Mycol. V (1907) p. 533. — 5332 Ascomatibus sparsis, clavato-stipitatis, convexo-pileiformibus, margine subinvolutis, lacteis, glabris, ca. 400 μ latis; stipite subcylindraceo, recto, levi, versus basim attenuato, 1,2 mm. alto, superiore parte flavidulo, 180 μ lato, inferiore fuscidulo 120 μ lato, glabro, contextu prosenchymatico ex hyphis parallelis flavidulis; ascis clavatis, apice rotundatis, 25-30 \times 4,5-5, octosporis; sporidiis subclavatis, 1-cellularibus, 5-6 \times 1,2-2, hyalinis, distichis; paraphysibus filiformibus, hymenium superantibus, hyalinis, 1,5 μ ., versus apicem 2-3 μ . crassis.

Hab. ad acus Pini silvestris putridos inter Vaccinia,

Pfaffenstein in *Helvetia saxonica* (FEURICH). — *Minutula*, habitu *Coniocybis*.

LEPTOGLOSSUM Cooke em Sacc. — Syll. VIII p. 47, XI p. 392, XIV p. 743, XVIII p. 8.

1. **Leptoglossum robustum** (Durand) Sacc. et Trav. — Syll. XX, p. 83 5333
— *Corynetes robustus* Durand, Ann. Mycol. VI (1908) pag. 416, fig. 40-44, 198-202. — *Ascomatibus gregariis* v. cæspitosis, atris, robustis, 2,5-8 cm. alt.; clavula brunneo-olivaceo tincta, obtusa, 1-3 cm. longa, 6-15 mm. lata, compressa v. sulcata; stipite tereti, brunneo-atro, glabro, nitenti, sursum leviter squamuloso, 1-4 cm. longo, 3-8 mm. lato; ascis clavatis, crassis, subsessilibus, apice contractis, poro J. cærulecenti, 100-150 \times 10-12 (plurimis 120-135 μ .), octosporis; sporidiis sursum distichis, hyalinis, levibus, cylindraceis, multiguttulatis, demum 7-11-septatis, 25-50 \times 4-6 (30-40 μ .); paraphysibus hyalinis, filiformibus, 2-3 μ . cr., apice leniter incrassatis et curvatis, non v. leniter sursum cohærentibus.

Hab. ad terram sabulosam inter folia dejecta, Maine, Mississippi Amer. bor.

2. **Leptoglossum fumosum** Peck, Mus. N. Y. Nat. Hist. Bull. n. 116 5334 (1907) p. 25, *Microglossum fumosum* (Peck) Durand in Ann. Myc. VI (1908) p. 408, t. V, f. 15-16 et t. 19, f. 203-205. — *Ascomatibus solitariis* v. saepius cæspitosis, clavatis, 2-6 cm. alt., parte ascigera obovata, elliptica v. oblonga, apice rotundata, plus minus compressa et longitud. sulcata, tertiam v. mediam partem ascomatis formante, satis discreta a stipite, e fumoso fulvescente, 0,7-3 cm. longa, 3-12 mm. lata; stipite tereti v. subpresso 1-3 cm. long., 3-5 mm. cr.; argillaceo, squamuloso v. glabrescente et nitidulo, intus plurilacunoso; ascis clavatis 100-150 \times 10-12, obturaculo jodo cærulecente, octosporis; sporidiis biseriatis, cylindricis, leviter curvis, initio continuis, denique 7-15-septatis, hyalinis, levibus, utrinque subrotundatis.

Hab. ad caudices putrescentes, Massachusetts et New York Amer. bor.

GEOGLOSSUM Pers. — VIII p. 42, X p. 2, XIV p. 743, XVI p. 699, XVIII p. 9.

1. **Geoglossum fallax** Durand, Ann. Mycol. VI (1908) p. 428, f. 61- 5335 64, 133-137. — *Ascomatibus solitariis*, clavatis, fulvis v. umbrinis, 2-8,5 cm. altis; clavula lanceolata, obtusa, compressa, 8-15 mm.

long., 3-5 mm. lata; stipite gracili, tereti, sursum squamuloso, 1-2 mm. crasso; ascis cylindraceo-clavatis, apice contractis, poro J cærulecenti, 150-175 \times 15-18, octosporis; sporidiis subdistichis, cylindraceo-clavatis, primo continuis et multiguttulatis, demum 7-12-septatis, 65-105 \times 5-7 (plurimis 80-100 μ .), longe hyalinis demum fuligineis; paraphysibus filiformibus, hyalinis, septatis, sursum curvatis v. circinatis, apicibus abrupte ellipsoideis v. globosis 5-6 μ . cr.

Hab. ad terram argillosam in silvis, New York et Michigan Amer. bor.

2. **Geoglossum pygmæum** Gerard in Durand, Ann. Myc. VI (1908) 5386 p. 429. — Ascomatibus pusillis, 0,5-2 cm. altis, exsiccatis brunneo-atris; clavula tenui, compressa; stipite gracili, leniter pilis fuscis septatis obpresso; ascis cylindraceo-clavatis, 175-200 \times 17-18, octosporis; sporidiis parallele positis, fuligineis, cylindraceo-clavatis, 15-septatis, 122-140 \times 6-7; paraphysibus rectis, filiformibus, deorsum hyalinis, rare septatis, 3 μ . csassis, sursum clavatis, fuligineis, septatis, constrictis, cellulis 12-14 μ . long., cellulæ terminali piriformi v. elliptica, 10-14 \times 7-8.

Hab. ad terram detritis ligneis mixtam, Poughkeepsie N. Y. Amer. bor. (W. R. GERARD).

3. **Geoglossum intermedium** Durand, Ann. Mycol. VI (1908) p. 431, 5387 fig. 66-67, 142-144. — Ascomatibus solitariis, atris, 3-4,5 cm. altis, clavula oblonga v. ovato-lanceolata, compressa, obtusa, 0,75-1,5 cm. longa, hymenio exsiccatio alveolato; stipite gracili, tereti flexuoso, brunneo-atro, 0,75-1 mm. crasso, sursum pilis flexuosis, septatis, brunneis obpresso; ascis cylindraceo-clavatis, J. cærulecentibus, 150-200 \times 20, octosporis; sporidiis bi-multiseriatis, crassis, clavatis, obtusis, longe hyalinis, demum pallide brunneis, 7-11-septatis, 55-75 \times 6; paraphysibus filiformibus, subhyalinis, rectis, raro septatis, sursum clavatis, apice subpyriformibus v. subglobosis, apicibus cum ascis cohærentibus epithecium brunneum formantibus.

Hab. in paludosis Knoxboro N. Y. (H. S. JACKSON) et in ligno putri Guelph Amer. bor. Ontario (J. H. FAULL).

4. **Geoglossum cohærens** Durand, Ann. Mycol. VI (1908) pag. 430, 5388 fig. 65, 138-139. — Ascomatibus clavatis, atris, 2,5-3,5 cm. altis; clavula tereti v. compressa, obtusa; stipite squamuloso; ascis clavatis, 150 \times 12-15; sporidiis inordinatis, cylindraceo-clavatis, longe hyalinis, demum pallido-brunneis, 0-7-septatis, 40-55 \times 5; paraphy-

sibus numerosis, filiformibus, ascis superantibus, raro septatis, apice abrupte clavatis v. piriformibus, brunneis, apicibus cohærentibus epithecium brunneum supra ascis formantibus

Hab. ad terram sabulosam, Newfield New Jersey Amer. bor.
(J. B. ELLIS).

5. ? *Geoglossum diffusum* Kütz., Philos. Bot. (1852) t. XX, fig. 1. 5389
(Verisimiliter idem ac *G. ophioglossoides*).
6. *Geoglossum Barlae* Boud., Bull. Soc. Myc. Fr. (1888) p. 76, t. XVI, 5340
f. 1, Icon. Mycol. III, t. 424, Discom. Europ. p. 86. — Nigro-
olivaceum, 3-5 cm. alt., clava compressa, glabra, sublinguiformi,
1-2 cm. lata; stipite pallidiore ad apicem nigro-furfuraceo; hy-
menio nigro-olivaceo, levi, non v. vix jove pluvio viscido, a sti-
pite discreto, clavam intus plenam et fuliginosam tegente; ascis cla-
vato-fusoideis, ad basim attenuatis et flexuosis, 300-320 \times 18-20,
paraphysibus fuliginosis septatis, simplicibus v. inferne divisis,
filiformi-clavulatis, sursum torulosis et eximie spiraliter contortis
aut undulatis, ibique 6-10 μ . cr.; sporidiis fuliginosis cylindraceis,
uno apice sensim attenuatis, rectis curvulisve, 7-septatis, 85-95 \times
6-7, intus granulosis.

Hab. ad terram argillaceam pr. Nicæam (BARLA) et Blois Gal-
liæ (BOUDIER). — Ut monui in Syll. VIII, p. 45, forte tantum
varietas *G. umbratilis* Sacc.

Subgen. *Glazoglossum* Durand. Ascomatibus viscidis.

7. *Geoglossum affine* (Durand) Sacc. et Trav. — Syll. XIX, p. 756 5341
— *Glazoglossum affine* Durand, Ann. Mycol. VI (1908) p. 421,
fig. 73-74, 165-167. — Ascomatibus gregariis, atris, viscidis, 1,5-
2,5 cm. alt.; clavula oblongo-clavata, obtusa, compressa; stipite
gracili, levi; ascis clavatis, 7-septatis, 43-65 \times 5-6; paraphysibus
filiformibus, 2,5 μ . cr., sursum clavatis, septatis, curvatis, fulige-
nis, cellulæ apicali abrupte elliptica v. globosa, 7-8 μ . cr., cellulæ
inferioribus aut cylindraceis aut nodulosis aut sæpe moniliformi-
bus, stipitem usque ad basim tegentes.

Hab. ad terram humosam, New York Amer. bor.

TRICHOGLOSSUM Boud., in Bull. Soc. Myc. Fr. I (1885) p. 109, *Geo-*
glossum subgen. *Trichoglossum* (Boud.) Sacc. Syll. VIII, pag. 45
(Etym. *thrix* trichos pilus et *glossum* pro *Geoglossum* h. e. *Geo-*
glossum pilosum).

1. *Trichoglossum hirsutum* (Pers.) Boud. — Syll. VIII, p. 46 (*Geoglossum*). — Var. *Doassansi* Patouill., Bull. Soc. Myc. Fr. XXV (1909) p. 129. — A typo differt sporidiis minoribus et parcior (7-) septatis; cylindraceis, rectis, brunneis, 85-95 \times 4-5.

Hab. in silva Gourzy pr. Eaux-Bonnes in Pyrenæis Galliæ (DOASSANS). — Var. *variabile* Durand, Ann. Mycol. VI (1908) p. 437, fig. 84-85, 182-184. — Sporidiis variabilibus, 80-150 μ . long., 8-14-septatis (plurimis 11-14-septatis); cetera ut in forma typica. — Ad terram humosam, New York, Delaware, N. Carolina. — Var. *Wrightii* Durand, l. c. p. 438, fig. 83, 174. — Sporidiis 110-140 μ . long., crassis, 8-9-septatis; cetera ut in forma typica. — In insula Cuba (WRIGHT).

2. *Trichoglossum gracile* Patouill., Bull. Soc. Mycol. Fr. XXV (1909) 5843 pag. 131. — Ascomatibus gregariis, atris, pusillis, 1-2 cm. altis, undique hirsutis; clavula ovata, obtusa, minuta, 1-3 mm. long., $1\frac{1}{2}$ - $1\frac{1}{2}$ mm. lata, compressa, setulis brunneis, rigidis, acutis, longissimis (300-400 μ .) valde prominenter obsita; stipite gracili, filiformi, æquali, flexuoso, hispido; ascis clavatis, octosporis, 120 \times 20, jodo cærulescentibus; sporidiis fusiformi-clavatis, utrinque sensim attenuatis, 115-160 \times 5-6, transverse 15-septatis; paraphysibus filiformibus, septatis, sursum fuligineis, vix incrassatis; cystidiis brunneis valde elongatis.

Hab. in muscis truncorum, Nova Caledonia (LE RAT).

3. *Trichoglossum rasum* Patouill., Bull. Soc. Mycol. Fr. XXV (1909) 5844 p. 130. — Ascomatibus gregariis, magnis usque ad 15 cm. altis, atris; clavula valde compressa, spathulata, lanceolata, sæpe inciso-crenata, 3-5 cm. longa, 6-20 mm. lata, sub lente vix setulosa; stipite gracili, 2-3 mm. crasso, tereti, flexuoso, hirsuto, setulis brunneis, rigidis, longiusculis, acutis; mycelio floccoso, brunneo, ex hyphis gracilibus, tenuibus, ramosis formato; ascis cylindraceo-clavatis, jodo cærulescentibus, 200 \times 20 circ. cr., octosporis; sporidiis opacis, brunneis, clavatis, una fine abrupte acutatis, 7-9-septatis, crassis, 115-140 \times 7-9; cystidiis opacis, spiniformibus, vix excedentibus, 260 \times 12; paraphysibus filiformibus, fuligineis, sursum uncinatis, vix incrassatis (4 μ .).

Hab. ad terram quisquiliisque in silvis montis Koghis Novæ Caledoniæ (LE RAT). — *Th. Walseri* proximum.

SPATHULARIA Pers. — Syll. VIII p. 48, XIV p. 744, XVIII p. 10.

1. *Spathularia linguata* A. E. Johnson, Bull. Minn. Ae. Nat. Sc. I 5845

(1880) p. 370; Durand, Ann. Mycol. VI (1908) p. 462. — Grengaria, raro solitaria, 2,5-5 cm. alta, capitulo stipite magnitudine subæquante, 0,5-2 cm. lato; capitulo lingulato, tenui, compresso, subæquali, albo, v. albo et colore flavido v. ferrugineo picto; stipite albo v. flavido-albo, crasso, firmo; ascis elongatis, clavatis; sporidiis filiformibus, ascis longitudine fere subæquantibus, rectis v. curvis, multiguttulatis.

Hab. inter muscos in paludosis, Amer. bor. — Sec. Durand verisimiliter cum *Spath. clavata* comparanda.

VIBRISSEA Fr. — Syll. VIII p. 51, XI p. 392.

1. *Vibrissea foliorum* Thaxter in Durand, Ann. Mycol. VI (1908) 5346 p. 454, fig. 113. — Ascomatibus grégariis, stipitatis, mollibus; parte ascigera convexa, 1-1,5 mm. lata, luteo-aurantiaca; stipite pallido, 2-5 mm. longo, gacili, translucido, deorsum pilis obpresso; ascis gracilibus, cylindraceis, apice rotundatis, J. non cæruleoscentibus, 150-180 \times 5-6; sporidiis 8, parallele positis, hyalinis, filiformibus, 85-100 \times 1; paraphysibus filiformibus, hyalinis, apice leniter piriformibus.

Hab. in foliis et cupulis quercinis emortuis, West Haven Conn. (R. THAXTER). — *V. truncorum* affinis sed valde distincta.

Fam. 12. Pezizaceæ

Sect. 1. Hyalosporæ.

SPHÆROSOMA Kl. — Syll. VIII p. 56, XVIII pag. 11. — Quoad genus et ejus synonymiam cfr. ROUPPERT *Revision du Genre Sphærosoma*, cum icon. et 2 tab. in Bull. Acad. Sc. Crac. (1908) p. 649 et (1909) p. 90 et SETCHELL in *Univ. of California Public. in Bot.* IV (1910) p. 114.

1. *Sphærosoma Janczewskianum* Rouppert, Bull. Ac. Sc. Cracovie (1908) p. 649, (1909) p. 90, f. 5-6. — Ascomatibus dispersis, subgloboso-discoideis 2-5 mm. diam., olidis, aurantiacis, basi solito latiore, rhizoidibus arenæ immixtis instructis, marginatis; hypothecio pseudoparenchymatico, hyphis ascogenis stratum subhymeniale formantibus, una cellula ascogena 40-56 μ . lata, periphysibus 8-10 μ . cr. hymenium cingentibus circundata: ascis cylindraceis 8-

sporis, 220-270 \times 18-24, hyalinis, paraphysibus multo longioribus, parte apicali superficiem hymenii formantibus, 300-320 \times 4, ad apicem 6-8 μ . latis, guttulatis; sporidiis sphæroideis, hyalinis, immaturis vix ellipsoideis, echinulatis, 18-22 μ . d., echinulatis, 1-2 μ . long.

Hab. in terra arenosa prope fontem inter Gramina et Muscos, in Polonia ad Raciazek prope Vistulam fluvium. — *Sphaeros. echinulato* Seav. proximum, sed differt fabrica coloreque ascumatum, ascis cylindraceis nec subclavatis, sporidiis minoribus, echinulis brevioribus, paraphysibus brevioribus et tenuioribus, guttulatis, periphysibus.

RUHLANDIELLA P. Henn. — Syll. XVII p. 241. (Ex errore calami inter Hymenogastraceas locata).

1. *Ruhlandiella hesperia* Setchell, Univ. of California Public. in Bot. 5348 v. IV (1910) n. 5, p. 116, tab. 15. — Ascomatibus cartilagineo-carnosis, dilute fuscis, hemisphæricis aut late reniformibus, 2-6 mm. diam., inferne brevi stipite aut paucis fasciculis mycelialibus suffultis, externis hymenio omnino vestitis, internis pseudoparenchymaticis; ascis cylindraceo-clavatis, 200-250 μ . longit, 24-28 μ . diam., Jodi ope cærulescentibus, paraphysibus elongatis, gracilibus, lente aut passim moderate apice tumidulis, ad apices maxime curvatis et in gelatinæ strato pigmentato conglutinatis multo quam ascis longioribus; sporidiis sphæroideis, dilutissime fuscis, irregulatiter alveolatis, 21-25 μ . diam.

Hab. ad terram sub foliis Eucalypti sp. in Berkeley, California (N. L. GARDNER).

ACETABULA (Fr.) Fuck. — Syll. VIII p. 59, XVI p. 701, XVIII p. 13.

1. *Acetabula Barlae* Boud., Hist. et classif. Discomyc. Europe (1907) 5349 p. 40; Icon. Mycol. II, tab. 245. — Major, 3-5 cm. alta, totidem lata, ascomate cupulato, intus intense fuligineo-nigro, extus pallidore, minute furfuraceo-velutino; pediculo brevi, crasso, albido, costis dichotome ramosis ad dimidiam partem cupulæ productis et extremitatibus fuligineis; ascis majoribus, cylindraceo-clavatis, 360-380 \times 16-20; paraphysibus pallide fuliginosis, ad apicem incrassatis, 8-9 μ . latis; sporidiis ellipsoideis, guttula oleosa media maxima et granulis majoribus repletis, 20-32 \times 11-12.

Hab. ad terram pr. Nicæam [Nizza] (BARLA). — Ab *Ac. vulgari* et *ancili* colore obscuriore et sporidiis minoribus diversa.

2. ***Acetabula longipes*** (Boud.) Sacc. et Trott., *Cyathipodia longipes* 5350 Boud., Hist. et Classif. Discomyc. Europe (1907) p. 39. — Major, 5-6 cm. alta, 4-5 lata, ascomate longe pedunculato, intus fulvo, extus pallidiore, tantum pruinoso, pediculo pallido, elongato, 5-6 mm. crasso, costato-sulcato, costis breviter sub cupula prominentibus non divisis, sursum pruinoso; ascis majoribus, 350-400 \approx 20-24, octosporis; paraphysisbus elongatis, pallidis, ad apices incrassatis, 7-10 μ . crassis; sporidiis ellipsoideis, majoribus, intus guttula oleosa media crassa et guttulis minoribus repletis, 20-24 \approx 13-15.

Hab. ad terram, Lagny prope Parisios. — Inter *Cyathipodium* et *Acetabulum* media.

3. ***Acetabula platypodia*** (Boud.) Sacc. et Trav. — Syll. XIX, p. 4 — 5351 *Cyathipodia platypodia* Boud., Hist. et Classif. Discomyc. Europe (1907) p. 39; Icon. Myc. II, tab. 241. — Minor 2-3,5 cm., ascomate fulvo-cinerescente, cupulato, extus concolore sed pallidiore, granuloso-puberulo; stipite late compresso, bicostato; ascis octosporis, cylindraceo-clavatis, 280-300 \approx 15-18; paraphysisbus elongatis, pallidis, ad apicem clavulatis, intus granulosis, clava 5-6 μ . cr.; sporidiis minoribus, ellipsoideis, achrois, intus guttula oleosa media crassa et rarius granulis paucis adjunctis repletis, 15-18 \approx 12.

Hab. ad terram pr. Nicæam (Nizza).

GEOPYXIS Pers. — Syll. VIII p. 63, X p. 3, XI p. 393, XIV p. 744, XVI p. 702, XVIII p. 14.

1. ***Geopyxis alpina*** v. Höhn., Ann. Myc. III (1905) pag. 555, cum 5352 icon. — Ascomatibus sparsis, 3-8,5 mm. latis et altis, tenuibus, e cupulato suburceolatis, basi brevissime stipitiformi-angustatis, supra plerumque parum contractis, margine pallidiore, tenui, denticulato, intus extusque concoloribus, rubido-flavo-ochraceis, subglabris, subnitidis; ascis cylindraceis 300 \approx 12, octosporis; sporidiis recte v. suboblique monostichis, hyalinis, late ellipsoideis, levibus, plerumque mucoso-vestitis, guttulatis, 15 \approx 8-9,5; paraphysisbus filiformibus 2-3 μ . cr., apice non incrassatis; contextu pseudoparenchymatico, cellulis circ. 12 μ . diam. J-.

Hab. ad terram calcaream parum humosam, Schneeberg Austriae inf., 1400 m. alt.

2. ***Geopyxis ? granulosa*** P. Henn., in Voeltzkow Reise Ostafrika HI (1908) p. 32, tab. III, fig. 27. — Ascomatibus singularibus, cam-

panulato-concatis, carnosis, extus pallide cinereis, granulato-verrucosis, margine crenulato-incisis c. 2-2,5 cm. diam., disco levi pallide olivaceo; ascis cylindraceo-clavatis apice rotundatis, octosporis, 180-230 \approx 12-16; paraphysibus basi ramosis, filiformibus, ad apicem incrassatis, septatis, guttulatis, olivaceis, 2,5-3 μ . cr.; sporidiis ellipsoideis, hyalinis, levibus, 1-2-guttulatis, 8-11 \approx 6-7.

Hab. ad terram muscosam, Fénérive Madagascar. — A typo generis ascomatibus extus granulato-verrucosis recedit.

3. **Geopyxis scabra** Rehm, Hedw. XXVIII (1889) p. 302, t. 7, f. 15. 5354

— Ascomatibus cyathoideis, stipitatis; stipite 7 mm. alto, vix 2 mm. cr.; cupula 3 cm. lata, 1 cm. alta, glabra, cervino-fuscidula, punctulis albis maculata, margine integro prædita, disco pallide cervino; ascis cylindraceis, crassis, apice rotundatis, octosporis, 250 \approx 18, paraphysibus ramosis, 2 μ . cr., hyalinis, apice haud conglutinatis obvallatis; sporidiis ellipsoideis, crasse tunicatis, 1-cellularibus, levibus, dilute flavidulis, intus granuloso-oleosis, 25-27 \approx 12-14, monostichis.

Hab. ad lignum, patria ignota (ex herb. Berolinensi).

PEZIZA Dill. em. — Syll. VIII p. 73 et 511, X p. 3, VI p. 393, XIV p. 744, XVI p. 703, XVIII p. 16.

1. **Peziza gigantea** (Rehm) Sacc. et Trott., *Pustularia gigantea* Rehm, 5355 Ascom. Amer. bor., Ann. Myc. v. III (1905) p. 517. — Ascomatibus cæspitosis, sessilibus, vix stipitiformiter elongatis, irregulatiter urceolatis, margine demum undulato et plus minusve inciso, disco flavescente undulato, extus glabris, parenchymatice contextis, albescensibus, 12 cm. diam., siccis corrugatis, fuscescentibus, carnosis; ascis cylindraceis, apice truncatis, 300 \approx 10, jodi ope totis cærulescentibus, octosporis; sporidiis oblongis, utrinque rotundatis, glabris, 1-cellularibus, haud guttatis, hyalinis, 10-12 \approx 5-6, monostichis; paraphysibus filiformibus 2 μ ., versus apicem 3,5 μ . cr., dilute flavidulis.

Hab. ad terram, Machirac Island Mich. Amer. bor. (HARPER). — A *Peziza vesiculososa* magnitudine ascomatis et sporidiis dimidio minoribus in primis diversa.

2. **Peziza amplissima** (Boud.) Sacc. et Trav. — Syll. XX, p. 309 — 5356 *Aleuria amplissima* Boud., Icon. Myc. t. II, pl. 263; Hist. et Clas. Discomyc. Europe (1907) p. 44. — Maxima, 5-10 cm. lata, cupulata et subundulata, extus ad basim subglabra, pallida, ad marginem ochraceo-fuscescens aut lutescenti-ferruginea, grosse fur-

furacea et minute denticulata, hymenio fuso aut fusco-brunneo; ascis cylindraceis, pallide fuscescentibus, octosporis, 280-300 \times 14-16; paraphysibus hyalinis, intus spumosis, ad apices clavulatis, 8-13 μ . crassis; sporidiis ellipsoideis, hyalinis, extus minutissime et vix perspicue granulosis, 16-18 \times 9-10.

Hab. ad terram sabulosam in silvis Beauchamp et Isle-Adam Gallia. — *Aleuria amplissima* Fr. est *Pez. coronaria* Jacq.

3. **Peziza mirabilis** (Rehm) Sacc. et Trott., *Plicaria mirabilis* Rehm 5357 in Strasser Verh. k. k. zool.-bot. Ges. Wien LX (1910) p. 477; absque diagnosi. — Magna, hymenio obscure brunneo; sporidiis non guttulatis, levibus; paraphysibus supra incurvatis, brunneis.

Hab. in areis carbonariis, Sonntagberg Austria.

4. **Peziza vesiculososa** Bull. — Syll. VIII, p. 83 — var. *aparaphysata* 5358 Spieg., Myc. Arg. IV, in Ann. Mus. Buenos Aires (1909) p. 442. — Tantum differt ascis semper paraphysibus destitutis.

Hab. ad terram humosam in hortis, Los Hornos pr. La Plata, Argentina.

5. **Peziza silvestris** (Boud.) Sacc. et Trav. — Syll. XX, p. 317 — 5359 *Aleuria silvestris* Boud., Icon. Mycol. II (1906) pl. 261; Hist. et Class. Disc. Europe (1907) p. 44. — Magna, sessilis, 4-8 cm. lata, e cupulato applanata, extus pallida, subtiliter tomentoso-furfuracea, intus fusco-fuliginea, margine sublobato lutescente; paraphysibus hyalinis, ad apicem clavulatis 6-8 μ . cr.; ascis clavato-cylindraceis, octosporis, 220-250 \times 14-15, jodo cærulescentibus; sporidiis ellipsoideis, albis, levibus, sed intus minutissime granulosis, vacuolo centrali plus minusve conspicuo, 17-18 \times 9-10.

Hab. ad terram sabulosam in silvis Fontainebleau Galliae.

6. **Peziza ampliata** Pers. — Syll. VIII, p. 92 — var. *costifera* Boud., 5360 Icon., Mycol. t. II, pl. 264 bis (1906), Hist. et Classif. Discomyc. Europe (1907) p. 44 (*Aleuria*). — A typo differt ascomate subtus costulis simplicibus v. bifurcatis prædicto.

Hab. ad terram prope Montmorency. — var. *palustris* Boud., l. c. p. 44 (1907). — A typo differt forma minus cupulata, plus pulvinata, ascomatibus magis sessilibus crassioribus et regularibus, paraphysibus apice magis distincte clavulatis. — Ad lignum putrem Ecouen et Angers, Gallia.

7. **Peziza annamitica** (Pat.) Sacc. et Trott., *Aleuria annamitica* Pa- 5361 touill., Bull. Soc. Myc. de Fr. XXV (1909) p. 3, tab. II, fig. 3. — Magna, 6-8 cm. diam., carnosa, fragilis; ascomate sessili, cupuliformi dein expanso, plicato-undulato, margine inciso sinuato,

extus albo, glabro, hymenio castaneo; ascis longis, 18-20 μ . latis, operculatis, 8-sporis; paraphysibus numerosis, granulis castaneis repletis, linearibus, apice incrassatis, 8-10 μ ; sporidiis ovoideis, masculis, 25 \times 17, biguttulatis, verrucis validis, obtusis v. acutiusculis dense obsessis.

Hab. in ligno putri terra immixta, in silva Kam ly, Annam Asie (EBERHARDT). — *Pezizæ Emileiae* Cooke proxima.

8. **Peziza spiralis** (Hazsl.) Sacc. et Trav. — Syll. XX, pag. 317 — 5362

Pustularia spiralis Hazsl., Magyar Discom. p. 270, t. I, f. 32. — Ascomatibus sessilibus, concavo-scutellatis, centro tantum affixis, 5-6 cm. latis, carnosis, albidis. margine obtusulo, disco atro-purpureo; ascis tereti-clavatis, apice rotundatis, infra medium (abnormiter?) spiraliter contortis, octosporis; sporidiis elliptico-fusoideis, utrinque acutiusculis, hyalinis.

Hab. ad terram in silvis pr. Eperies Hungariae.

9. **Peziza sundaica** (v. Höhn.) Sacc. et Trott, *Pustularia sundaica* 5363

v. Höhn., Stzb. k. Ak. d. Wiss. Wien, CXVIII, Abt. I (1909) p. 395. — Ascomatibus carnosis e globoso patellaribus usque ad 4 cm. latis et 3 cm. altis, tenuibus griseo-flavidis v. pallide griseo-alutaceis, extus glabris, basi in pedicellum brevem (3-5 mm.) crassum granuloso-pruininosum angustatis; contextu parenchymatico; ascis cylindraceis, octosporis, 200-260 \times 14, apice operculatum aperientibus; paraphysibus filiformibus, apice parum claviformi incrassatis; sporidiis supra monostichis, hyalinis, levibus, ellipsoideis, 14-15 \times 9-9,5. J. +

Hab. ad terram in silvis primævis, Tjibodas in ins. Java. —

Pust. variae (Hedw.) affinis.

10. **Peziza rubro-fusca** (Rehm) Sacc. et Trott, *Plicaria rubro-fusca* 5364

Rehm, Ascom. Amer. bor., Ann. Myc. v. III (1905) p. 577. — Ascomatibus cæspitose congregatis, sessilibus, in stipitem brevissimum elongatis, demum patellaribus, disco crasse subcrenulato-marginato, plano, orbiculari, demum irregulariter undulato, excipulo glabro, e cellulis parenchymaticis c. 20 μ . diam., externis fuscidulis contexto, rubro-fuscis, 2-4 cm. diam., ceraceis; ascis cylindraceis, apice truncatis, jodo cærulescentibus 300 \times 10, octosporis; sporidiis ellipsoideis, utrinque rotundatis, glabris, 1-cellularibus cum guttis 2 magnis oleosis, hyalinis, 15-17 \times 7-8, monostichis; paraphysibus, filiformibus, 2 μ ., ad apicem clavatam flavo-fuscam 6 μ . cr.

Hab. ad terram, Isle Royale Mich. Amer. bor. (HARPER). —

Juxta *Pezizam sepiatram* et *sepiatrellam* ponenda species, magnitudine et colore ascomatum et sporidiis minoribus plane aliena.

11. *Peziza repandooides* (Rehm) Sacc. et Trott., *Plicaria repandooides* 5365

Rehm, Ascom. Amer. bor., Ann. Myc. v. III (1905) p. 518. — Ascomatibus sessilibus, patellaribus, ad basim brevissime substipitatis, disco orbiculari plano, dein umbilicato-undulato, tenuissime mox incise marginato, hyalino-fuscidulo, excipulo glabro, contextu parenchymatico, amylaceo-albescente, 3-4 cm. diam., siccis disco albo-pruinosis, vario modo complicatis, ceraceis; ascis cylindraceis, apice truncatis ibique jodo cærulescentibus 300×10 , octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, haud guttatis, levibus, $12-14 \times 6-7$, monostichis; paraphysibus filiformibus, septatis, 2μ ., versus apicem 3μ . cr., ibique flavidulis et subcurvatis.

Hab. ad lignum putridum Populi, Port Byron III. Amer. bor. (HARPER). — Pertinet ad stirpem *Pezizæ repandæ* et *ampliatæ*; ab utraque forma haud clavata paraphysium nec minus sporidiorum minutie divergens.

12. *Peziza scissa* Karst., Acta Soc. pro Faun. et Fl. fenn. XXVII, 5366 4 (1905) p. 13. — Ascomatibus subæspitosis, sessilibus, contortis, latere scissis, margine integro, involuto, extus pruinosis, alutaceis, disco obscuriore, 2-3 cm. latis; ascis longissimis 10μ . circ. cr.; sporidiis monostichis, ellipsoideis, levibus, biguttulatis, hyalinis, circiter 12×5 ; paraphysibus filiformibus, flexuosis, circ. 1μ . cr.

Hab. in fragmentis ligneis terraque in regione Kuopioënsi, Fennia (O. LÖNNBOHM). — Ad *Pez. cochleatam* nec non *P. alutaceam* proxime accedit.

13. *Peziza humicola* (Boud.) Sacc. et Trav. — Syll. XX, p. 314 — 5367 *Aleuria humicola* Boud., Icon. Myc. t. II, pl. 262 (1906), Hist. et Classif. Discomyc. Europe (1907) p. 45. — Media, 2-3 cm. lata, sessilis, ochraceo-citrina, extus concolor, minute furpuracea, margine subcrenulata; hymenio cupulare, dein planato; ascis maximis, cylindrico-clavatis, octosporis, operculatis, jodo cærulescentibus, $450-460 \times 24-28$; paraphysibus linearibus, albis, intus spumosis, ad apicem parum incrassatis, $6-8 \mu$. cr.; sporidiis hyalinis, majoribus, ellipsoideis, $25-28 \times 12-14$.

Hab. ad terram in viridario Montmorency, Gallia. — Colore et magnitudine sporidiorum distincta.

14. *Peziza lilacina* (Boud.) Sacc. et Trav. — Syll. XX, pag. 315 — 5368 *Aleuria lilacina* Boud., Icon. Mycol. t. II, pl. 277 (1906), Hist. et Classif. Discomyc. Europe (1907) p. 45. — Media, 1,5-4,5 cm.

lata, cupularis, dein applanata, extus glabra, tantum ad marginem lutescentem minutissime furfuracea, pallide cinereo-purpurascens aut lilacina, hymenio saturatiore dein expallente; ascis cylindraceis, octosporis, 250-300 \approx 12-14; paraphysibus tenuibus, ad apicem vix incrassatis, septatis, 4-5 μ . cr., hyalinis; sporidiis ellipsoideis, intus non guttulatis et granulis externis ad extremitatem positis denique secedentibus ornatis, 13-15 \approx 8-9.

Hab. ad terram herbosam combustam, Gallia merid. (ROLLAND).

— *Aleur. violaceæ* affinis sed differt colore pallidiore, paraphysibus hyalinis, sporidiis minoribus etc.

15. **Peziza asterigma** (Vuill.) Sacc. et Trav. — Syll. XX, p. 309 — 5369

Aleuria asterigma Vuill. Assoc. franç. Avanc. Sc. (1886) pag. 1, t. X (extr.), Boudier, Ic. Mycol. t. 266. — Ascomatibus solitariis v. paucis cæspitosis, breviter obconico-stipitatis v. subsessilibus, nunc infundibuliformibus, nunc irregulariter expansis margineque incisis, ceraceis, ex albido brunneolis, basi albo-byssinis, extus minute verruculosis; disco concavo rarius convexo, 15-25 mm. lato, rarius usque ad 30 mm.; ascis octosporis, cylindraceis, deorsum tenuatis, apice truncatis, operculatis, jodoque tinctis, 300 \approx 19; paraphysibus filiformi-clavulatis, septulatis, ascum vix superantibus; sporidiis oblique monostichis, ellipsoideis, 23 \approx 13, pro more 1-guttulatis, hyalinis.

Hab. in fimo, sponte evoluta in laboratorio botanico, Nancy Galliae. — Socius adest status conidiophorus, qui omnino videtur *Edocephali* species a peraffini *Ed. fimetario* (Riess) Sacc. vix diversa conidiis brevioribus, nempe 6,5 \approx 3, pariter ex hyalino ochraceis et vesicula 25 μ . diam. pariter sphaerica, muriculata.

16. **Peziza paludicola** (Boud.) Sacc. et Trav. — Syll. XX, p. 315 — 5370

Aleuria paludicola Boud., Icon. Mycol. t. II, pl. 269 (1906), Hist. et Classif. Discomyc. Europe (1907) pag. 46. — Minor, 1-2 cm. lata, breviter stipitata, carnosa, spissa, hymenio plano non cupulato, fulvo, extus pallescens minute furfuracea; ascis majoribns, octosporis, hyalinis, 330-400 \approx 20-25, jodo leniter cærulescentibus; paraphysibus crassis, parce septatis, ad apicem incrassatis, 18-22 μ . cr., pallide ochraceis; sporidiis majoribus, ellipsoideis, hyalinis sed leniter ochraceo-tinctis, 23-26 \approx 12-15.

Hab. ad folia putrida Caricis in paludosis prope Montmorency, Gallia. — *Pezizæ ampliatæ* var. *palustri* affinis sed differt ascomate stipitato, paraphysibus, ascis, sporidiis majoribus etc.

17. **Peziza Labessiana** (Boud.) Sacc. et Trav. — Syll. XX, p. 315 — 5371

Aleuria Labessiana Boud., Icon. Mycol. t. II, pl. 282 bis (1906) Hist. et Classif. Discomyc. Europe (1907) pag. 46. — Media aut minor, 1-2 cm. lata; ascomate sessili, extus ad basim pallido et ad marginem umbrino et furfuraceo, hymenio saturatiore badio-fuligineo; ascis, elongatis, octosporis, vix fuscescentibus, 260-300 × 17-18, jodo cærulescentibus; paraphysibus tenuibus, septatis, paleo-fuliginosis, ad apices vix incrassatis, 2-7 µ. cr.; sporidiis a-chrois, ellipsoideo-ovatis, extus minutissime verruculosis, intus granulis minutis in acervulos extremitatibus conglomeratis denique evanescens, sed non guttulis oleosis repletis, 15-17 × 10-11.

Hab. ad terram herbosam, Angers Galliæ (M. LABESSE). — *P. olivacea* affinis a qua differt statura minori, colore magis fuligineo, sporidiis minoribus sed latioribus etc.

18. *Peziza contorta* (Rick) Sacc. et Trott., *Plicaria contorta* Rick, 5372 Broteria V (1906) p. 30. — Ascomatibus gregariis, mutua pressione deformibus, 1 cm. latis, margine obtuso, undulato, viridi-flavis, extus furfure pallidiore tectis, sessilibus; ascis 250-350 × 13-18, octosporis, jodi ope cærulescentibus; sporidis ellipsoideis, deum guttulatis, hyalinis v. subflavidulis, episporio levi, uniseriatus, unilocularibus; paraphysibus versus apicem sensim valde dilatatis, capite usque ad 10 µ. latis, dilute fuscidulis.

Hab. ad terram, Rio Grande do Sul Brasiliæ. — *Pezizæ delächtanti* Starb. affinis.

OTIDEA (Pers.) Fuck. — Syll. VIII p. 94, X p. 4, XI p. 394, XIV p. 560, XVI p. 507, XVII p. 688.

1. *Otidea felina* (Pers.) Bres., F. Trident. II, p. 103, t. 215, *Peziza* 5373 *felina* Pers., Myc. Europ. I, p. 223. — Ascomatibus auriformibus, usque ad basim perviis, griseo-cinereis, e flocculo glabrescentibus, 3-4,5 cm. alt., 2-3 cm. latis, basi attenuato-subradicatis, disco levi, pallide alutaceo, carne pallida, miti, inodora; ascis cylindraceis pedicellatis, jodo non tinctis, 170-200 × 9-12; paraphysibus ramosis, apice curvato v. recto, vix incrassato, 3-4 µ. cr.; sporidiis ellipsoideis, 2-guttulatis, 11-13 × 6-8.

Hab. in silvis Coniferarum in agro Tridentino, subcaespitosa. — Hypothecii contextus sub ascis subparenchymaticus, medio hyphoso-intricatus, excipuli subparenchymaticus in hyphas fasciculatas productus.

DISCINA Fr. — Syll. VIII p. 99, X p. 4, XI p. 395, XIV p. 747, XVI p. 708, XVIII p. 21.

1. **Discina repanda** (Wahlb.) Fr. — Syll. VIII, p. 100 — var. **terrestris** Bres., Fung. Trid. tab. 190 (*Peziza varia* f. *terrestris*). — A typo differt habitatione terrestri, statura pro more majore, disco saturatius colorato, margine evidentius crenulato; cetera eadem.

Hab. ad terram juxta vias v. ad margines agrorum in agro Tridentino. — Sub *Peziza varia* Hedw. cl. Bresadola colligit, ut varietates, *Discinam repandam*, *Geopyxidem Catinum* et hanc formam terricolam.

2. **Discina disticha** Starb., Ascom. Schwed. Chaco-Cordill. Exp., Ar-kiv f. Bot. Bd. V (1905) p. 2, fig. 2. — Ascomatibus cupulatim applanatis, basim versus oblique contractis vel breviter fere stipitatis, stipite plicato, margine acuto, paullum repando, crenulato, lateritiis, disco pallidiore, contextu carnoso-gelatinoso, hyalino, intricato, c. 3 cm. diam.; ascis octosporis, cylindraceis vel subclavatis, sursum obtusatis, 80-90 \times 25; sporidiis hyalinis, oblongatis, curvulis vel inaequilateralibus, in superiore parte asci primo saepe transversim jacentibus vel congregatis, denique omnibus saepissime distichis, guttulatis, 25 \times 11; paraphysibus numerosis, hyalinis, guttulatis, filiformibus, 1,5 μ . crassis, sursum non incrassatis.

Hab. in ligno mucido in silva primæva, col. Ijuhy Rio Grande do Sul, Brasilia (MALME). — Quoad locum in systemate haec species valde dubia; ob texturam facile inter Ombrophilas locanda, ab illis autem magnitudine, a Pezizis veris sporidiis distichis divergit.

3. **Discina ?lenta** Starb., Ascom. Schwed. Chaco-Cordill. Exp., Ar-kiv f. Bot. Bd. V (1905) pag. 2, fig. 1. — Ascomatibus evolutis late expansis, disco convexo vel applanato, acute marginatis, sub-tus stipiteque breviter et crasse sulcatis, farinoso-puberulis, inaequaliter sed non lobatim determinatis, sordide albidis, hymenio flavo-virescente; contextu dense intricato hyphis angustis, stipitem versus magis porrectis, in pariete excipuli membranaceo-porrectis, 1-3 cm. diam.; ascis octosporis, cylindraceis vel cylindraceo-subclavatis, sursum obtuse rotundatis, membrana perpaullum incrassata, 140-153 \times 15; sporidiis hyalinis, imbricatim monostichis, oblongato-ellipsoideis, plerumque curvulis vel inaequilateralibus, guttulis duabus ornatis, 25-30 \times 11,5-12; paraphysibus numerosis, hyalinis, conglutinatis, filiformibus, 1-2 μ . latis, sursum perpaullum clavulatim incrassatis, clavula 1,5-2,5 μ . crassa, ascos aequantibus.

Hab. ad terram? Rio Grande do Sul, col. Ijuhy (MALME). —

Quoad genus dubia species, contextu distincta.

4. **Discina ferruginascens** (Boud.) Sacc. et Trott., *Disciotis ferrugi-nascens* Boud., Hist. et Class. Discomyc. Europe (1907) pag. 42, Icon. Mycol. t. II, pl. 274. — Pro genere minor, 1-2,5 cm., pallide fulva leniter ferruginascens, primo cupularis, dein applanata, subtus pallidior glabra; ascis cylindraceis, octosporis, ad basim subattenuatis, 250-280 \times 12; paraphysibus gracilibus supra leviter incrassatis 3-4 μ . latis; sporidiis hyalinis, ovato-fusoideis, ad apices non granulosis, 14-17 \times 7-8, Jodi ope immutatis.

Hab. ad terram pr. Nizza (BARLA). — Teste Boud. l. c. *Discina venosa* Cooke et Sacc. Syll. p. p. est *Peziza Barlaeana* Bres. — Syll. XVI, p. 703.

5. **Discina maturescens** (Boud.) Sacc. — Syll. XI, p. 395 (imperfecte 5378 descripta), *Disciotis maturescens* Boud. Bull. Soc. Mycol. Fr. (1891) p. 214, t. XV, f. 1. — Ascomatibus primum cupulatis dein applanatis, subimmarginatis, integris, 3,5-4 cm. latis, brunneo-badiis, extus pallide cinereo-rufescens, crassiusculis, carne pallida, disco saepe undulato; ascis cylindraceis, operculatis, 400 \times 20-23, ad basim paullo tenuatis, octosporis, paraphysibus simplicibus v. ad basim divisis, septatis, filiformi-clavulatis, 7-10 μ . cr., fuscis, intus granulosis; sporidiis ellipsoideis, hyalinis aut vix ochraceis, levibus, ad apices saepius granulis plasmaticis extus coronatis, 22-25 \times 12-13.

Hab. ad terram argillosam pr. Nizza (BARLA). — Var. *fulvescens* Boud., Ic. Mycol II, t. 256 bis, Discom. d' Europe p. 42. — A typo nonnisi colore fulvescente dignoscenda. — In Gallia.

6. **Discina australica** Cooke, Austral. Fungi (1892) p. 255, t. XXI, 5379 f. 176. — Ascomatibus cupuliformibus, majusculis, 5-10 cm. latis, dein expansis, glabris, ochraceis, in stipitem brevem crassum radiculosum supra attenuatis; disco concolori; ascis sporidiisque adhuc ignotis.

Hab. ad terram, Victoria Australiae.

DETTONIA Sacc. — Syll. VIII p. 105, XIV p. 747.

1. **Detonia Rouastiana** (Boud.) Sacc. et Tray. — Syll. XIX, p. 563. — 5380 *Plicaria Rouastiana* Boud., Icon. Mycol. t. II, pl. 303 (1906), Hist. et Classif. Discomyc. Europe (1907) pag. 50. — Media, 2,5-3 cm. lata, sessilis, tota fulvo-purpurascens, subtus pallidior verruculosa, hymenio e cupulari applanato dein convexo, undulato, margine

sublobato; ascis cylindrico-clavatis, ad basim subattenuatis, hyalinis v. pallide fuscescentibus, octosporis, 250-300 \times 15-16; paraphysibus ad apicem crassioribus, septatis, fuscescentibus, saepe gelatina tectis, 7-8 μ cr.; sporidiis perfecte sphaericis, intus parce granulosis, hyalinis aut pallide fuscescentibus.

Hab. ad terram sabulosam in silvis Coniferarum, Lyon Galliae (ROUAST).

2. *Detonia albida* Rick, Broteria V (1906) pag. 29. — Ascomatibus 5381 intus extusque albidis, 2 mm. latis, extus tenuiter tomentosis; ascis 180 \times 16; sporidiis globosis 15 μ . diam., episporio glabro; paraphysibus filiformibus.

Hab. ad terram, Rio Grande do Sul Brasiliæ.

GALACTINIA Cooke — Syll. VIII p. 106, XI p. 395, XIV p. 748,

XVI p. 708.

1. *Galactinia Cornu* Boud., Icon. Mycol. t. II, pl. 299 (1906), Hist. et 5382 Classif. Discom. Europe p. 49 (1907). — Media, 2-3 cm. lata, badio-purpurea, subtus dilutior et minute verruculosa, sessilis, appallata, margine subdenticulata; ascis octosporis, operculatis, cylindraceis, 300-350 \times 15-20, jodo cærulescentibus; paraphysibus ad apicem vix clavatis, fusco-badiis, septatis, 8-9 μ . cr.; sporidiis ovoidatis aut ovato-ellipsoideis, saepe acuminatis, extus verruculosis, intus guttula oleosa saepe evanescente, 20-23 \times 7-9, fulvescentibus.

Hab. ad terram in calidario, Parisiis Galliae (M. CORNU). —

Phæop. apiculatæ affinis sed differt statura et ceteris notis.

2. *Galactinia Luisieri* Torrend, Bull. Soc. portugaise Sc. Nat. III, 1 5383 (1909) p. 5 (extr.). — Minor v. media, primum cupularis 6-8 mm. lata, demum expansa, 1-3 cm., intus nigra, extus pallidior, imo ad basim albo-grisella, furfuracea v. granulosa, margine æquali, fracta lac albo-cæruleum exsudans; ascis elongato-cylindraceis, ad basim vix attenuatis, octosporis, 280-300 \times 13-17; paraphysibus hyalinis, gracilibus, subramosis, apice incrassatis, ibique 4-5 μ . cr., jodo apice cærulescentibus; sporidiis ovoides, hyalinis, levibus, matritate minute verrucosis, 2-guttulatis, 16-18 \times 4-5.

Hab. ad terram graminosam prope rivulum, Serra d' Ossa, Villa Viçosa Lusitaniæ. — *Gal. badio-fuscæ* et *Gal. saniosæ* affinis.

3. *Galactinia badio-fusca* Boud., Icon. Mycol. t. II, pl. 297 (1906) 5384 Hist. et Classif. Discomyc. Europe (1907) pag. 48. — Media aut minuta 0,5-1,5 cm. lata, sessilis, badio-fusca, extus pallidior, granulosa, margine minute granulata, ascomatibus primo concavis

dein applanatis, fractis lac albo-cæruleum sudantibus; ascis elongato-cylindraceis ad basim vix attenuatis, octosporis, pallide fuliginosis, 300-320 \approx 12-17; paraphysibus hyalinis, septatis, ad apices subincrassatis, 6-7 μ . cr., epithecio gelatinoso saepe tectis; sporidiis perfecte ovoideis, hyalinis, extus crebre verruculosis, intus guttula unica media rarius bi-aut tridivisa donatis, 13-15 \approx 9-10; carne fusca lactescente.

Hab. ad terram in silvis. Montmorency, Gallia. — *Gal. saniosæ* affinis sed differt statura majori et sporidiis laticoribus magis minute verrucosis.

PYRONEMA Carus — Syll. VIII p. 107, XI p. 395, XVIII p. 22.

1. **Pyronema rugosum** Pat. in Doass. et Patouill. Champ. n. 43. Re- 5385
vue Mycol. III, n. 12 (1881) p. 11 et IV (1882) t. 25, f. 8. — Ascomatibus convexis, minutis, 1 mm. diam, confluentibus, extus eximie areolato-rugosis, late rubris, siccis rubro-aurantiacis, in mycelio albo membranaceo-connexo et subsecidente nidulantibus; hypothecio parco rubente; ascis tereti-clavatis, deorsum breviter tenuato-stipitatis, octosporis, filiformi-paraphysatis; sporidiis ovoido-ellipsoideis utrinque obtuse rotundatis, oblique monostichis, 1-guttulatis, hyalinis.

Hab. in muris nondum plane exsiccatis, Poligny Galliæ. — A *Pyronemate omphalode* dignoscitur, teste auctore, sporidiis crassioribus et, ut videtur, superficie ascomatis areolato-rugosa. Forte *P. haemastigmati* affinus, sed mycelium in hoc minus evolutum.

2. **Pyronema amaniense** P. Henn., Engl. Jahrb. XXXVIII (1905) 5386 p. 116. — Ascomatibus dense gregariis, cupulatis, ceraceo-carnosis, extus pallidis, margine aurantiis, disco flavidio concavo, c. 1-1,5 mm. diam., hyphis flavide brunneolis v. hyalinis, ramosis, septatis, granulatis, usque ad 15 μ . cr. circumdatis; ascis cylindraceo-clavatis, vertice rotundato-obtusis, octosporis, 120-140 \approx 9-11, paraphysibus filiformibus, guttulatis, hyalinis 2,5 μ . cr., apice hamatis et usque ad 4 μ . cr.; sporidiis monostichis, ellipsoideis, obtusis, eguttulatis, hyalinis, 12-16 \approx 5-7.

Hab. in areis carbonariis. Amani Ost-Usambara Africæ contr.

3. **Pyronema tapesioides** Rehm — Syll. XI, p. 396 — var. **saccharinum** Rehm, Ascom. exsicc. n. 1732, Ann. Myc. V (1907) p. 467. — Ascomatibus primum glaucis subglobosis rubro-flavidis demum late apertis, disco flavo-albido 0,3-2,5 mm. lat.; excipulo parenchymatico e cellulis rotundatis v. fuscoideis, 40 \approx 30, hyalinis; ascis

cylindraceis, rotundatis, c. 150 \times 7-8, octosporis; sporidiis elongatis, rotundatis, levibus, unilocularibus, 15-18 \times 9, monostichis; paraphysibus filiformibus 3 μ . cr., supra usque ad 6 μ ., hyalinis.

Hab. in superficie limi (sedimenti) in saccharificio, Schönowitz prope Zülz Silesiæ (BUCHS).

BARLAEINA Sacc. — Syll. VIII p. 111, X p. 5, XI p. 396, XIV p. 748, XVI p. 710, XVIII p. 23.

1. **Barlaeina livida** (Rehm) Sacc. et Trav. — Syll. XIX, p. 139 — 5888
Crouania livida Rehm in Hazsl. Magyar Discom. (1886) p. 262, t. VII, f. 26. — Ascomatibus sessilibus scutellatis, glabris, obtuse marginatis, lividis; ascis cylindraceis, apice rotundatis deorsum longe tenuato-stipitatis; paraphysibus filiformi-clavatis obvallatis, octosporis; sporidiis monostichis perfecte sphæricis, levibus, crassiuscula tunicatis, 14-15 μ . diam., hyalinis.

Hab. ad terram in Hungaria (LOJKA).

2. **Barlaeina subcærulea** (Kirschst.) Sacc. et Trott. *Barlaea subcærulea* 5889
Kirschst., Verh. Bot. Ver. Brandenb. XKVIII (1906) p. 46. — Ascomatibus solitarie insidentibus, applanato-depressis, orbicularibus, acutiuscule marginatis, pallide cyaneis, siccis flavescentibus, 3-5 mm. diam., ceraceis; ascis cylindraceis, supra rotundatis vel subtruncatis, operculatis, 140-170 \times 10, breviter pedicellatis, octosporis; sporidiis monostichis, hyalinis, globosis, crebre verruculoso-aculeatis, centro uniguttulatis, 8-9 μ . diam.; paraphysibus filiformibus, continuis, supra sæpe subcurvulis, hyalinis.

Hab. ad terram herbosam prope Gross-Behnitz Germaniaæ.

3. **Barlaeina dictydiola** (Boud.) Sacc. et Trav. — Syll. XIX, p. 139 5890
— *Lamprospora dictydiola* Boud., Icon. Mycol. t. II, pl. 403 (1906)
Hist. et Classif. Discomyc. Europe (1907) p. 68. — Minuta, 3-5 mm. lata, aurantiaca, margine lato et dentato pallidiore; ascis octosporis, cylindricis, 230-300 \times 13-15; paraphysibus aurantiacis ad apicem vix incrassatis, ad basim ramosis et septatis, jodo tinctis, 6-7 μ . crassis; sporidiis perfecte rotundatis, albis, extus minute et tenuissime reticulatis, intus guttula oleosa crassa saepius unica repletis, 15-16 μ . latis.

Hab. ad muros muscoso, Montmorency, Gallia. — Sporidiis minute reticulatis distincta.

4. **Barlaeina Crec'hqueraultii** (Cr.) Sacc. — Syll. VIII, pag. 113 —
var. **macrantha** Boud., Icon. Mycol. t. II, pl. 405 (1906), Hist. et

Classif. Discom. Europe p. 69 (1907) [*Lamprospora*]. — A typo differt sporidiis spinulis validioribus tectis.

Hab. ad terram in Gallia.

5. **Barlæina Strasseri** Bres. in Strasser, III Nachtr. Pilz. Sonntagb. 5391 (Verhandl. zool. bot. Gesell. Wien (1905) p. 613). — Ascomatibus carnosis, dense gregariis, sessilibus, concavo-applanatis, glabris, vi-vide etiam in sicco cinnabarinis, 2-4 mm. latis; ascis cylindraceis, stipitatis, 180-200 \times 10-11, jodo haud tinctis; paraphysibus filiformibus, 1 μ . latis, apice curvatis, haud incrassatis; sporidiis globosis v. subglobosis, levibus, 8-10 μ . diam. vel 10 \times 9.

Hab. in areis carbonariis jam vetustis ad muscos v. ad terram in silvis Montis Sancti, Sonntagberg Austriae inf. — A *B. Polytrichii* Sch., *cinnabrina*, *carbonaria* diversa; cum *Barlæina Rickii* Rehm, forsan conjugenda.

6. **Barlæina carbonicola** (Boud.) Sacc. et Trav. — Syll. XIX p. 138 5392 — *Lamprospora carbonicola* Boud., Icon. Mycol. t. II, pl. 401 (1906), Hist. et Classif. Discomyc. Europe (1907) p. 68. — Minuta, aurantiaca, 1,5-3 mm. lata, margine late denticulata, subtus dilutior; ascis clavatis, octosporis, amplis, ad basim sensim attenuatis, 210-250 \times 15-19; paraphysibus septatis, aurantiacis, ad apicem paullum incrassatis, 7-8 μ . cr., simplicibus aut ad basim divis; sporidiis albis, levibus, perfecte sphæroideis, intus guttula oleosa crassa in maturis unica, in junioribus granulis plus minusve numerosis comitata, 13-15 μ . cr.

Hab. ad terram muscosam in areis carbonariis, Montmorency Gallia. — A speciebus affinibus differt sporidiis sphæroideis levibus.

7. **Barlæina læterubra** Rehm, Ascom. Amer. bor., Ann. Myc. v. III 5393 (1905) p. 516 (*Barlaea*). — Ascomatibus sessilibus, gregariis, primitus globoso-clausis, dein patellaribus, irregulariter orbicularibus, distincte marginatis, disco læte rubro, extus glabris, pallidius rufescens, 1-4 mm. diam., carnosus; ascis cylindraceis, apice rotundatis, 180-200 \times 12, octosporis, jodi ope nulla; sporidiis globosis, levibus, guttam 1 magnam oleosam in cludentibus, hyalinis, 10 μ . diam., monostichis; paraphysibus, filiformibus, septatis, ad apicem hamatis, 1,5 μ . cr., hyalinis.

Hab. ad terram, Madison Wisconsin Amer. bor. (HARPER). — A proxima *B. convexella* colore et sporidiis multo minoribus divergens, item a *B. globifera* colore et paraphysibus hamatis.

8. **Barlæina kerguelensis** P. Henn., Deutsche Südpolar-Exped. Bd. 5394 VIII (1906) Extr. p. 8, t. I, f. 11 a-c. — Ascomatibus primo sub-

globosis, dein discoideo-explanatis, carnosulis, coccineis, extus sub-pallidis, levibus, primo marginatis, 1-2 mm. diam., disco plano coccineo; ascis cylindraceo-clavatis apice obtuso-rotundatis, c. 280-340 μ . long., p. sp. 140-180 \times 18-22, octosporis; paraphysibus basi ramosis, filiformibus, intus aurantio-guttulatis, c. 3 μ . cr., apice 4-8 μ . incrassatis, rotundatis; sporidiis monostichis, globosis, hyalinis, verrucoso-echinatis, c. 17-20 μ ., verrucis obtusis vel acutis c. 4-5 \times 2.

Hab. ad terram muscosam, Kerguelen-Station (E. WERTH). — *Barl. asperellæ* Rehm affinis, a qua differt ascis longioribus, sporidiis verrucoso-echinatis, etc.

HUMARIA (Fr.) Fuck. em. Sacc. — Syll. VIII p. 118, X p. 4, XI p. 396, XIV p. 749, XVI p. 710, XVIII p. 166.

1. *Humaria lacteo-cinerea* Rehm, Ascom. Amer. bor., Ann. Myc. III 5395 (1905) p. 517. — Ascomatibus gregariis, sessilibus, patellaribus, disco irregulariter explanato, repande marginato, margine mox recurvo, irregulari, cinereo-albo, 0,5-2 cm. diam., excipulo glabro, albescente, in stipitem brevissimum subcylindraceum elongato, cereis; ascis cylindraceis, apice subtruncatis, 120-150 \times 10-12, octosporis, jodi ope immutatis; sporidiis ellipsoideis, utrinque obtusis, 1-cellularibus, gutta oleosa centrali magna præditis, hyalinis, episporio crasso verrucoso, 12-18 \times 7-8, monostichis; paraphysibus filiformibus, septatis, 3-4 μ ., versus apicem subclavatum 5 μ . cr., hyalinis.

Hab. in aquæductu pineo in calidario, Madison Wisconsin Amer. bor. (HARPER). — Fungus colore albo sporidiisque verrucosis insignis videtur, sed specimina visa senilia.

2. *Humaria lilacina* (Boud.) Sacc. et Trav. — Syll. XIX, p. 880 — 5396 *Aleuria lilacina* Boud., Ic. Mycol. II, t. 277, Discom. d'Europe, p. 45. — Media, cm. 1,5-4,5 lata, cupularis, dein applanata, extus glabra, tantum ad marginem lutescentem minutissime furfuracea, pallide cinereo-purpurascens aut lilacina, disco saturatiore dein ex-pallente; ascis cylindricis, octosporis 250-300 \times 12-14; paraphysibus tenuibus, apice vix incrassatis, septatis, 4-5 μ . cr., hyalinis; sporidiis ellipsoideis intus non guttulatis et granulis externis utrinque positis denique secedentibus ornatis, 13-15 \times 8-9.

Hab. ad terram locis aridis in Gallia meridionali (ROLLAND). —

Ab affini *H. violacea* probe distincta.

3. **Humaria livida** (Lamb.) Sacc et Trav. — Syll. XIX, p. 880 — 5397
Leucoloma livida Lamb. Fl. Mycol. Belg. Suppl. I, p. 318, f. 63 a.
 — Gregaria, conferta, carnosa, minuta, plano-scutellata, cinereo-livida, margine integro v. irregulariter lobato; sporidiis ellipsoideis, 24 \times 12, 1-guttulatis, hyalinis.
Hab. ad lapides, Mæstricht Hollandiæ.
4. **Humaria olivaceo-fusca** Rehm, Contr. Mycol. Hung. (Növ. Közl. 5398
 (1905) p. 6). — Ascomatibus sessilibus, primitus fere subimmersis, globoso-clausis, dein urceolatis, demum margine crasso plus minusve irregulariter inciso, excipuli contextu parenchymatico, glabris, olivaceo-fuscis, carnosus, 1 cm. diam.; ascis subclavatis, apice rotundatis, 150 \times 20, octosporis, jodo immutatis; sporidiis fusoides, 1-cellularibus, guttam oleosam magnam includentibus, levibus, hyalinis, monostichis, 20-22 \times 10-12; paraphysibus filiformibus, septatis, 2 μ ., versus apicem sensim 5 μ . cr. ibique flavidulis.
Hab. in loco eluto, Berencsfalu, prope Selmecbánya Hungariae (KMET). — Sporidiis fusiformibus a ceteris *Humariae* speciebus olivaceo-fuscis terrincolis diversa.
5. **Humaria humosa** Fr. — Syll. VIII, pag. 120 var. **anthracobia** 5399
 Boud., Hist. et Classif. Discomyc. Europe (1907) p. 67. — A typo differt statura semper minori et habitatione.
Hab. in areis carbonariis, Montmorency et silva Carnelle Gallia.
6. **Humaria schemnitziensis** Rehm, Contr. Mycol. Hung. (Növ. Közl. 5400
 (1905) p. 6. — Ascomatibus sessilibus, mox irregulariter explantatis, suborbicularibus, dein repandis, crasse marginatis, nodulose brevissime stipitatis, excipulo glabro, crasse parenchymatice contexto, fusco-aurantiacis, carnosus, 0,5-1,5 cm. diam.; ascis cylindraceis, apice rotundatis, longissimis, 10 μ . cr., octosporis, jodo immutatis; sporidiis oblongis, utrinque obtusis, 1-cellularibus, haud guttatis, levibus, 10-12 \times 6-8, monostichis; paraphysibus filiformibus, 2,5 μ . ad apicem 3-4 μ . cr., septatis, hyalinis.
Hab. ad terram in silva abietina, Hodrusbánya prope Selmecbánya (KMET). — Quoad colorem similis *H. nemorosæ*, que autem nuper non explorata (cfr. Rehm, Discom. p. 955).
7. **Humaria wisconsiensis** Rehm, Ascom. Amer. bor., Ann. Myc. III 5401
 (1905) p. 517. — Ascomatibus gregariis, sessilibus, globoso-clausis, mox patellaribus, orbicularibus, disco distincte marginato, piano, aurantiaco-flavo, haud cyathoideis, extus glabris, pallidioribus, hyphis albidis, substrato affixis, ceraceis, 0,5-5 mm. diam.; ascis cla-

vatis, apice rotundatis, 40-45 \times 5-6, octosporis, jodo immutatis; sporidiis ellipsoideis, 1-cellularibus, interdum subcurvatis, hyalinis, 6-7 \times 3, distichis; paraphysibus filiformibus, septatis, 2-2,5 μ . cr., haud clavatis, flavidulis; excipulo crasso, parenchymatico, versus marginem pseudoprosenchymatico.

- Hab.* ad calamos putridos Caricis, Blue Mountains Wisconsin Amer. bor. (HARPER). — *Humaria flavotincta* B. et Br. (Cfr. Cooke Mycogr. f. 38) imprimis ascomatibus cyathiformibus mycelioque flavo divergit.
8. **Humaria Boudieri** (Quél.) Sacc. — Syll. VIII, p. 146 — var. *spadicea* Boud. Icon. Mycol. t. III, pl. 446, Histoir. et Classif. Discom. Europe p. 96 (1907) (*Discinella*). — A typo differt colore pallidiore minime purpurascenti.

Hab. ad terram in silvis, Beauchamp Galliæ.

9. **Humaria furfurella** (Starb.) Sacc. et Trav. — Syll. XIX, p. 878 — 5408
Melachroia furfurella Starb., Ascom. Schwed. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 3, fig. 3 a-c. — Ascomatibus sparsis vel nonnullis gregariis, superficialibus, primo cylindraceo-sphærioideis vel subturbinatis, mox expansis, cupulatum patellatis, late centraliter ad matricem fixis, excipulo pallide furfuraceo, margine orbiculari, acuto, perpaullum crenulato, totis cremeis vel incarnatis, disco interdum obscuriore, pellucidis, contextu cartilagineo-gelatinoso, hypothecii intricato, excipuli porrecto, 2-8 mm. diam.; ascis octosporis, clavatis, sursum rotundatis, longissime pedicellatis, p. sp. 105-140 \times 12-14; pedicello aequilongo vel longiore; sporidiis recte vel saepe oblique vel fere transversim monostichis, ellipsoideis, interdum inaequilateralibus, guttulis duabus ornatis, lenissime colore roseo tinctis, 19-20 \times 10-11,5; paraphysibus filiformibus, fere ad medium furcatis, sursum vix clavulato-incrassatis, 2-2,5 μ .

Hab. in ramulis mucidis, Tatarenda Gran Chaco, Bolivia. — Sicca ascomata varie contracta, extus ochraceo-albida, furfuracea, rugoso-plicatula, hymenio obscuriore, saepe fulvo-rubescente; hymenophores breves, flexuose, saepe globuloso-vel ovato-inflatæ e pariete exentes furfurem excipuli formant.

10. **Humaria nitida** (Boud.) Sacc. et Trav. — Syll. XIX, p. 881 — 5404
Anthracobia nitida Boud., Icon. Mycol. t. II, pl. 388 (1906), Hist. et Classif. Discomyc. Europe (1907) p. 65. — Minuta 1,5-3 mm. lata, rubro-aurantiaca, subtus pallidior; ascomatibus marginatis, extus pilis brevissimis, granulatum fasciculatis, septatis, ad apicem

brunneis, 60-80 \times 15, hymenio nitide aurantiaco-rubro; ascis cylindraceis, octosporis, 220 \times 15; paraphysibus simplicibus, ad apicem clava 8-10 μ . cr. terminatis, protoplasmate aurantiaco, jodo virecente repletis; sporidiis elliptico-oblongis, levibus, 2-guttulatis, 18-19 \times 8-9.

Hab. ad terram in areis carbonariis, Montmorency Gallia. — *Pyronem. (Anthr.) melalomati* affinis sed differt statura minori, colore magis rubro, paraphysibus magis clavulatis, sporidiis brevioribus sed latioribus.

11. **Humaria flavens** Feltg., Vorst. Pilzfl. I uxembg. Nachtr. IV (1905) 5405 p. 25. — Ascomatibus gregariis, liberis, patellaribus, 2-3 mm. latit; disco concavo v. subdepresso, udo pallide flavo, sicco aurantiaco, flocculoso marginato; extus concolori subfurfuraceo; ascis cylindraceis, supra rotundatis vel depressis, J-, basi longe angustatis, octosporis, 140-175 \times 10-14, p. spor. 60-75 μ . long., paraphysibus filiformibus apice subclavatis vel subcapitellatis, 3-6 μ . diam., flavidis, guttulato-farctis obsitis; sporidiis monostichis, obtuse ellipsoideis, rectis, extus verrucoso-aculeolatis, unilocularibus, grosse biguttulatis, hyalinis, 8-10 \times 5-6.

Hab. ad terram argillaceam sub radice vetusta, Knaphoscheid Luxemburgia. — *H. flavo-rubenti* Rehm affinis.

12. **Humaria minutula** Pat., Bull. Soc. Myc. Fr. XXIII (1907) p. 84. 5406 — Sparsa v. gregaria, sessilis, minuta, 2 mm. circ. lata, extus supraque carnea, hymenio saturatiore, primo cupularis dein explanata subconvexa, extus levigata, margine obtuso integro, carne pallidiore; ascis operculatis, cylindraceis, 250 \times 15, octosporis, J-; sporidiis ovoideis, monostichis, hyalinis, levibus, majusculis, 15-21 \times 11-14, intus obscure biguttulatis; paraphysibus numerosis, septatis, vix incrassatis (4 μ .), fere hyalinis, non granulosis.

Hab. ad terram in fragmentis ligneis putrescentibus, Africa occidentali.

13. **Humaria xanthomeia** (Pers.) Quél. — Syll. VIII, p. 128 — var. 5407 *americana* Rehm, in Ann. Mycol. III (1905) p. 230 (*Melachroia*). — Ascomatibus ad basim plus minusve contractis, inde peltiformibus.

Hab. in foliis dejectis infossis Pinorum, Tacoma Park, Washington Amer. bor. (SHEAR).

14. **Humaria globoso-pulvinata** Crossl., Naturalist (1908) pag. 216. — 5408 Ascomatibus gregariis v. sparsis, subrubro-carneis, firmulis, globosis, tum globoso-pulvinatis, puncto centrali affixis, carnosis, 1-1,25

mm. lat., 0,5-0,75 mm. cr., extus glabris, carne molli, hyphis excipuli intertextis, ramosis, septatis, 3-5 μ . cr., cellulis corticalibus subglobosis, 7-8 μ . diam.; ascis late cylindraceo-clavatis, saepe curvatis, 140-150 \times 16-18, apice truncato-rotundato, deorsum tenuatis, octosporis; sporidiis oblongo-ellipsoideis, eguttulatis, continuis, hyalinis, levibus, 12 \times 8; paraphysibus filiformibus, profusis, interdum ramosis, 3 μ . cr., plasmate granuloso, subrubro.

Hab. in sedimento dolii tinctorii inusitati, Hebden Bridge prope Halifax Britanniæ. — Nonnullis notis ad *Ascophanum* nutat sed asci non operculati, nec emergentes etc.

SOLANELLA J. Vanha in Monathefte für Landwirtsch. (1910) p. 4 (extr.) (Etym. *Solanum*, cui noxia). — Ascoma epigaeum, ex mycelio subterraneo filiformi, septato nascens, initio globulosum, clavatum, dein apertum et dilatatum, excipulo subnullo, h. e. ex setulis fusoideis sursum cuspidatis, septatis tantum formato; hypothecio tenui. Asci cylindracei, paraphysati, octospori. Sporidia ellipsoidea, continua, hyalina. — Probabiliter *Humariae* v. *Psilopeziae* nimis affine genus.

1. **Solanella rosea** J. Vanha, l. c. pag. 4-6, tab. I et II. — Chara- 5409 cteres generis. Ascomata, rosea, molliuscula, 0,5-1,2 mm. diam.; setulae fusoideo-ampulliformia, longe acute cuspidata, 3-4-septata, ascos paullo superantia; asci breve stipitati, apice rotundati, 160 \times 11-12; sporidia ellipsoidea utrinque rotundata, 16-18 \times 10, farcta, subhyalina.

Hab. in agris, ubi *Solanum tuberosum* colitur et cui, teste auctore, morbum dictum *Kräusel- oder Rollkrankheit* affert, in Moravia.

ASCODESMIS v. Tiegh. — Syll. VIII p. 824, XVIII p. 29. 5410

1. **Ascodesmis echinulata** Bainier, Bull. Soc. Myc. France XXIII (1907) p. 139, tab. XX (absque diagn.). — Ab *Ascod. nigricante* v. Tiegh. differt sporidiis ovoideis, 11 \times 8 \times 4, exosporio semper echinulato numquam reticulato.

Hab. in fimo in Gallia.

2. **Ascodesmis reticulata** Bainier, Bull. Soc. Mycol. Fr. XXIII (1907) p. 137, tab. XIX (absque diagn.). — Ab *Ascodesmi nigricante* v. Tiegh. differt sporidiis majoribus, 15 \times 11, exosporio reticulatum prominente obscuriore.

Hab. in fimo canino et bovino in Gallia.

SARCOSCYPHA (Fr.) Sacc. — Syll. VIII p. 153, XI p. 398, XIV p. 753, XIV p. 715, XVIII p. 30.

1. **Sarcoscypha concatenata** Rick, Broteria V (1906) p. 32. — Asco-5412 matibus breviter stipitatis, 8 mm. latis, extus albis, sericeis, obiter venosis, intus avellaneo-roseis, carne sicca; ascis longissimis, 10-12 μ . latis; sporidiis 18-30 μ . long., 10 μ . latis, in ascis plerumque ellipsoideis, extra ascum cylindraceis, biguttulatis, levibus, muco hyalino obvallatis, in asco inter se concatenatis, apicibus truncatis; paraphysibus filiformibus, hyalinis.

Hab. in ramo Pini, Rio Grande do Sul Brasiliæ.

2. **Sarcoscypha dawsoniensis** Peck, Bull. Torr. Bot. Club, XXXIII 5413 (1906) p. 220. — Ascomatibus cupulatis, 1-2 cm. latis, confertis v. cæspitosis, sessilibus v. radicatis, basi saepe inæqualibus v. sulcatis, irregularibus, extus pruinosis v. tomentosulis, pallidis basi albidis; disco rubro v. aurantiaco, saepe plicato-rugoso; ascis cylindraceis, 200-280 μ . long.; sporidiis monostichis, ellipsoideis, levibus, 20 \times 10; paraphysibus angustis, filiformibus, apice subincrastatis.

Hab. ad terram infra plantulam musci Leptobryii piriformis, West Dawson Yukon Terr., Amer. bor. (E. B. STERLING).

3. **Sarcoscypha javensis** v. Höhn., Stzb. k. Ak. d. Wiss. Wien, CXVIII 5414 Abt. I (1909) p. 395. — Ascomatibus molli-carnosis, plerumque paucis cæspitosis, 3-4 mm. latis, scutellatis, in pedicellum 0,5-1 mm. longum angustatis, disco pallide rubro-carmineo, extus levibus v. longitudinaliter rugulosis, e pallide rubido-albidis; hypothecio 300-350 μ . crasso, fibroso-plectenchymatico, excipulo transverse marginato, 180 μ . crasso; ascis cylindraceis, octosporis, 230 \times 10; paraphysibus filiformibus e basi semel v. bis ramosis, 1,5 μ . cr.; sporidiis recte monostichis, cylindraceo-ellipsoideis, plerumque uncinque obtusulis, eguttulatis, 16-18 \times 8. J-

Hab. in ligno putri in silvis primævis Tjibodas in ins. Java. — *Sarcopusioni* B. et C. affinis.

MACROPODIA Fuck. — Syll. VIII p. 158, XVIII p. 31.

1. **Macropodia Dubaleni** (Boud.) Sacc. et Trott., Cyathipodia Dubaleni 5415 Boud., Hist. et Classif. Discomyc. Europe (1907) p. 39. — Pro genere major, 5-10 cm. alta, receptaculo non lobato nec plicato, cupulaeformi dein repando et subconvexo; hymenio ochraceo-pallido aut ochraceo-cinerascente, subtus albo aut albido, levi; stipite cylindrico, fistuloso, elongato, gracili, deorsum incrassato et com-

presso, saepe ad basim lacunoso, colore saturatiore et minutissime albido-puberulo; paraphysibus elongatis, septatis, ad apices crassioribus et nebulosis, 7-10 μ . crassis; ascis octosporis, cylindraceis, 300-330 \times 18-20; sporidiis ellipsoideis, intus guttula media crassa minoribus adjunctis repletis.

Hab. ad terram argillaceam in silvis, Isle-Adam et Saint-Sever Landes, Gallia.

2. *Macropodia gracilis* Hazsl. Magyar. Discom. p. 276, t. II, f. 34 5416 (1886). — Longe stipitata, glabra; cupula subhemisphaerica, concava, subcartilaginea, grisea, stipite cylindrico, 3 cm. longo, 2 mm. cr., gracili; ascis et sporidiis ut in *Macr. macropode*.

Hab. ad terram inter muscos in Hungaria.

PLECTANIA Fuck. — Syll. VIII p. 163, XVI p. 716, XVIII p. 32.

1. *Plectania gelatinosa* Pat., Bull. Soc. Myc. Fr. XXIII (1907) p. 70. 5417

— Ascomatibus hemisphaericis, regularibus, 15 mm. circ. diam., margine integro crasso recto praeditis, extus leniter floccosis nigrovioletaceis; disco concavo, levi, olivaceo; stipite cylindrico 1 cm. long., 5 mm. cr., basi pilis sparsis brunneis elongatis, septatis, 5 μ . cr. prædicto; trama gelatinosa, hyalina, inflata, ex pilis incoloribus, ramosis, 3-4 μ . cr. constituta; ascis apice truncatis basi elongatis, attenuatis, gracilibus, flexuosis, 300 \times 16, octosporis; J-; paraphysibus copiosis, bacillaribus, ramosis, septatis, apice coloratis et 3-4 μ . cr.; sporidiis monostichis, ovoideis, levibus, 10-12 \times 8.

Hab. ad lignum emortuum in vallis Djirin Indo-Chinæ.

LACHNEA (Fr.) Gill. — Syll. VIII p. 166, X p. 5, XIV p. 754, XVI

p. 716, XVIII p. 76.

1. *Lachnea folliculata* v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, 5418 Abt. I (1909) p. 396. — Ascomatibus patellariformiter expansis, extus rubro-brunneis, disco sordide rubro-miniato, 0,5-3 cm. latis, carnosis, parenchymaticis; setulis rubro-brunneis extus brevioribus, obtusis, ad marginem plures seriatis, 20-25-septatis, usque ad 1,3 mm. long., acutis, basi usque ad 40-48 μ . cr., tunica usque ad 9 μ . cr. præditis, basi saepe appendice radiciformi auctis; ascis cylindraceis, basim versus sensim stipitiformi-angustatis, octosporis, 250-280 \times 16; paraphysibus numerosis extus mucosis, 2-3 μ . cr., supra globosis, hyalinis et usque ad 9 μ . cr.; sporidiis monostichis, hyalinis, ellipsoideis, irregulariter obtuse verruculosis (verrucis 2 μ . latis), 24-25 \times 13-16, utrinque appendiculatis, processibus utrinque

acutis lateraliter adpressis et apicibus conoideo-folliculatis; sporidiis cum folliculis 50 μ . long. J-.

Hab. ad tabulas udas Tjibodas in ins. Java.

2. *Lachnea Boudieri* Sacc. et Trott., *Sepultaria Boudieri* Torrend 5419 Bull. Soc. portugaise Sc. Nat. III, 1 (1909) p. 6 (extr.). — Minor v. media, 7-15 mm. lata, 1-2 cm. alta, primum hypogæa, globosa, diu clausa, deinde ore epigæo et constricto dehiscens, demumque saepius in lacinias plures fissa, saltem in major. speciminibus; pilis longissimis 6-7 μ . cr., septatis, interdum ramosis, stramineis vel pallide fuscidulis ad basim vestita; disco urceolato albicante, apice granuloso v. furfuraceo, ad basim piloso; ascis breve stipitatis, cylindraceis, 210-220 \times 15-17; sporidiis ellipsoideis, 1-guttulatis, 23-25 \times 14-15; paraphysibus simplicibus linearibus ad apicem breviter incrassatis.

Hab. ad terram argillaceam in quercetis, Villa Viçosa Lusitanæ. — *Affinis L. arenosæ.*

3. *Lachnea rufo-brunnea* P. Henn., in Voeltzkow Reise Ostafrika III 5420 (1908) p. 32, tab. III, f. 28. — Ascomatibus gregariis, cupulato-explanatis, pallide brunneis, ad marginem pilosis, c. 5-8 mm. diam., disco rufo-brunneo, levi, pilis simplicibus, rigidis, atro-castaneis, septatis, acutis vel obtusiusculis, 300-500 \times 20-40; ascis cylindraceis, obtuso-rotundatis, octosporis, 180-220 μ . long., p. sporif. 100-150 \times 10-14; paraphysibus filiformibus c. 2 μ . cr., septatis, ad apicem clavato-incrassatis, hyalinis, 5-7 μ . cr.; sporidiis monostichis, ellipsoideis, hyalinis, aculeato-verrucosis, 13-18 \times 8-12.

Hab. gregaria ad terram Fénérive Madagascar. — *L. Chateri* (Smith) affinis sed differt colore rubro-brunneo, setulis etc.

4. *Lachnea Chelchowskiana* Rouppert, Bull. Ac. Sc. Cracovie (1908) 5421 p. 650. — Ascomatibus sessilibus, dispersis v. gregariis, 5-6 mm. latis, interdum per paria inter ae conjunctis et gemellis similibus, superficie hymenii brunneo-lutea, pilis brunneo-luteis, septatis, 240 μ . long., 4-6 μ . latis circumdata; ascis cylindraceis obtusis, octosporis, 130-160 \times 12-14, jodo non cæruleoscentibus, paraphysibus filiformibus, hyalinis, 2-3 μ . cr.; sporidiis ellipsoideis, hyalinis, 16-18 \times 8-12.

Hab. in terra argillacea ad Raciazek prope Ciechocinek Poloniae. — *Lachn. cinerella* Rehm proxima, differt ascomatibus majoribus, ascis minoribus, pilis longioribus sed minus crassis, colore hymenii atque excipuli.

5. *Lachnea Cocoës* (Pat.) Sacc. et Trott., *Ciliaria Cocoës* Pat., Bull. 5422

Soc. Mycol. de France XXII (1906) p. 52. — Sessilis, carnosa, primitus hemisphaerica demum appanata, 2-3 mm. diam., intus albida v. livida, extus brunneola, pilis brunneo-flavidis, septatis usque ad 0,5 mm. longis obsessa; ascis cylindraceis, longe attenuato-stipitatis, 8-sporis, 250 \approx 15; sporidiis monostichis, ovoideis, grosse obtuseque verrucosis, 10-20 \approx 10; paraphysibus linearibus, septatis, apice clavato-inflatis, hyalinis.

Hab. ad trunco putridos Coccoes nuciferæ, Taravao Polynesia. — *Lachnea livida* (Sch.) affinis, differt sporidiis grosse verrucosis, pilis longioribus acutis etc.

6. ***Lachnea Didymodontis*** P. Henn., Deutsche Südpolar-Exped. Bd. 5428 VIII (1906) Extr. p. 7, taf. I, fig. 8 a, e. — Ascomatibus cæspitosis, primo subgloboso-clausis, dein subhemisphaerico-cupulatis, 2-3 mm. diam., brunneolis, extus margineque pilosis, pilis flexuosis, septulatis, apice obtusis v. acutiusculis, hyalinis, usque ad 250 \approx 4-6; disco concavo, levi, concolori v. brunneo-fusco; ascis clavatis, apice rotundatis, octosporis, 120-180 \approx 15-20; paraphysibus densis conglutinatis, filiformibus, 3-3,5 μ . cr., apice subclavatis, 4-5 μ . incrassatis, brunneolis; sporidiis oblique monostichis v. subdistichis, ellipsoideis v. fusoideis, grosse 1-guttulatis, 15-18 \approx 10-12, episporio hyalino, primo sublevi, dein verrucoso-reticulato, angulato.

Hab. ad rupes inter species *Didymodontis*, Kerguelen-Station (E. WERTH).

7. ***Lachnea Torrentis*** Rehm, Ascom. exsicc. n. 1724, Ann. Myc. V 5424 (1907) p. 212. — Ascomatibus sparsis, sessilibus, primum globo-so-clausis, dein late apertis, disco flavescentibus, 1-2 (raro -5) mm. latis, extus pilis curvulis, acutis, 1-6-septatis, brunneolis, 120-200 \approx 15 tectis; ascis cylindraceis, supra rotundatis, 150 \approx 14, octosporis, jodi ope nulla; sporidiis elongatis, utrinque fortiter rotundatis, unilocularibus, non guttulatis, vix asperulis, hyalinis, 15-18 \approx 7-8, monostichis; paraphysibus filiformibus, supra rubro-purpurascens-tibus, usque ad 10 μ . cr.

Hab. in sabulosis Sperrbach-Tobel prope Spielmannsau in alpibus Algoviae (W. KRIEGER). — A *Lachnea ochroleuca* Bres. ascomatibus magis pilosis, a *L. carneo-sanguinea* Fuck. ascomatibus minoribus, sporidiis minoribus non guttulatis diversa.

8. ***Lachnea scutellata* (L.) Gill.** — Syll. VIII, p. 173 — var. *apopies-matis* Rehm, Ann. Mycol. VI (1908) pag. 117; Ascom. exsicc. fasc. 41, n. 1755. — A typo differt sporidiis plerumque levibus,

vix guttatis, 12-18 \vee 10-12, demum dilutissime flavidulis; paraphysibus usque ad 10 μ . lat., haud guttatis, hyalinis.

Hab. in seminibus fructuum putrescentium in umbrosis prope Seitenstetten Sonntagberg Austriae inf. (P. STRASSER). — *Apopiesma græce* est fæx et vinacea.

9. *Lachnea chrysotricha* Rehm, Ann. Mycol. V (1907) pag. 520. — 5426
Ascomatibus gregariis, primitus globoso-clausis, mox urceolatis, dein explanatis, sessilibus, demum irregulariter complicatis, disco cinereo-flavescente, excipulo dense fusco-tomentoso, ad marginem pilis simplicibus, rectis, acutis, septatis, glabris, dilute aureo-fuscidulis, cellulis ad basim 18 μ . latis, dense aggregatis, 1 mm. longis coronatis, ceterum pilis fuscis 350 \vee 12 obscurioribus obtectis; ascis cylindraceis, apice rotundatis, 150 \vee 15, octosporis; sporidiis obtuso-ellipsoideis, guttis 2 magnis oleosis repletis, scabriusculis, 1-cellularibus, hyalinis, 18-20 \vee 9-10, monostichis; paraphysibus filiformibus, septatis, 2 μ ., versus apicem usque 7 μ . crassis, hyalinis.

Hab. ad ligna putrida, Sailor's Encompment, Mich. Amer. bor. (S. A. HARPER). — *Lach.* *Woolhopeiae* et *L. lividae* nonnullis notis proxima.

10. *Lachnea theleboloides* (Alb. et Schw.) Gill. — Syll. VIII, p. 179 5427
— var. *saccharata* Rehm, Ascom. exsicc. n. 1733, Ann. Myc. V (1907) p. 468. — *Ascomatibus plerumque sparsis, primum globoso-clausis dein apertis flavescensibus, 0,5-3 mm., siccis convolutis; excipulo parenchymatico brunneo, margine pilis rectis, acutis, brunneis, septatis. 180 \vee 15 tecto; ascis cylindraceis 180 \vee 15, J -, octosporis; sporidiis elongatis, rotundatis, non guttulatis, levibus, hyalinis, 15 \vee 8, monostichis; paraphysibus filiformibus, septatis, 2,5-3 μ . cr., supra rotundato-clavatis usque ad 10 μ . cr., hyalinis.*

Hab. in superficie limi (sedimenti) in saccharificio Schönowitz prope Zülz Silesia (BUCHS).

11. *Lachnea subcrinita* Rehm, Ann. Mycol. VII (1909) p. 535. — 5428
Ascomatibus sessilibus, gregariis, primitus globoso-clausis, dein patellaribus, disco orbiculari, pallide flavidulo, 2-4 mm. diam., extus ad marginem pilis simplicibus, rectis, obtusis, fuscidulis, septatis, glabris, 200-250 \vee 8-10, versus basim excipuli pilis conglutinatis, c. 100 μ . long., ad basim usque 15 μ . cr., subacutis et asperatis obssessis, excipulo ceraceo, e cellulis parenchymaticis, subhyalinis, magnis contexto; ascis cylindraceis apice rotundatis, 150-180 \vee 15-18, octosporis, jodo immutatis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, hyalinis, episporio demum dilutissime longi-

tudinaliter plicato, brunneolo, 18-20 \times 12, monostichis; paraphysibus filiformibus, septatis, 3 μ . ad apicem usque ad 9 μ . cr., hyalinis.

Hab. ad lignum mucidum, Frankfort Michigan Amer. bor. (E. T. et S. A. HARPER).

12. *Lachnea calvescens* (Boud.) Sacc. et Trott., *Cheilymenia calve-* 5429
scens Boud., Icon. Mycol. t. II, pl. 374 (1906), Hist. et Classif. Discom. Europe p. 63. — Minuta, 2-5 mm. lata, aurantio-rubra, pulvinata, rotundata, rarius sublobata, subtus pallidior, parce et breviter pilosa; ascis cylindraceis, octosporis, 220 \times 18; paraphysibus ad apicem clavatis, aurantio-rubris, simplicibus aut ad basim divisus, jodo virescentibus, clavula 10-13 μ . cr.; sporidiis ellipsoideis, extus minutissime verrucosis, 19-20 \times 9-10; pilis brevibus, simplicibus, rarissimis, pallide fuscis, extremitate obtusa, ad basim simpli- cibus aut 2-3 divisus, 140-150 \times 10-12, 2-3-septatis.

Hab. ad terram viarum Montmorency, Gallia.

13. *Lachnea aurea* (Boud.) Sacc. et Trav. — Syll. XIX, p. 1010 — 5420
Cheilymenia aurea Boud., Icon. Mycol. t. II, pl. 385 (1906), Hist. et Classif. Discomyc. Europe p. 63 (1907). — Minuta, 2-4 mm. lata, luteo-aurantiaca, subtus pallidior, vix marginata, pilis bruneis septatis, 270-680 \times 10-15, acutis, præcipue ad marginem vestita; ascis cylindrico-clavatis, octosporis, 220-240 \times 17-20; paraphysibus simplicibus aut parce divisus, luteo-aurantiaci, septatis, ad apicem incrassatis; sporidiis ellipsoideis, hyalinis, 19-22 \times 12-13, saepe muco hyalino involutis.

Hab. ad fimum vaccinum, Angers Gallia (GAILLARD). — A *Lachn. stercorea* distincta.

14. *Lachnea Werthiana* P. Henn., Deutsche Südpolar-Exped. Bd. 5481 VIII (1906) Extr. p. 7, tab. I, fig. 10 a, d. — Ascomatibus primo subhemisphæricis clausis, dein cupulato-explanatis, extus ferrugineo-tomentosis, margine saepe undulatis, pilosis, pilis subulatis, apice acutis v. obtusiusculis, bruneis, septatis, 100-200 \times 15-18, disco subplano, coccineo, levi; ascis cylindraceo-clavatis, vertice rotundatis, octosporis, 200-250 \times 15-20; paraphysibus filiformibus, 3 μ . cr., septatis, apice clavatis, flavo-granulatis; sporidiis monostichis, ellipsoideis, 1-2-guttulatis, 16-22 \times 14-17, episporio hyalino, granuloso-subaculeato.

Hab. ad terram muscosam, Kerguelen Station (E. WERTH). — A *Lach. kerguelensi* Berk. sporidiis omnino diversa.

15. *Lachnea brunneola* Rehm — Syll. XI, p. 399 — var. *brasiliensis* 5482 Bresadola, in Rick, Fungi austro-amer. II, Ann. Mycol. vol. III

(1905) p. 15. — A typo differre videtur hymenio pallido et forma ascomatum primitus turbinata.

Hab. ad terram in Brasilia.

16. *Lachnea austriaca* Sacc. et Trott., *Lachnea* (Melastriza) *Boudieri* 5433 v. Höhn. in Rehm Ascom. exsicc. fasc. 46, n. 1876, Ann. Mycol. (1910) p. 298, non *Lachnea* (Sepult.) *Boudieri* Torr. — Sangui-neo-rubra, *Lachnea rubicundæ* affinis, a qua differt pilis acutis, simplicibus et sporidiis majoribus, 15-17 \times 10-12.

Hab. in argillosis prope Kalksburg in Wiener Wald Austriae.

17. *Lachnea antarctica* P. Henn., Deutsche Süd polar-Exped. Bd. 5434 VIII (1906) Extr. p. 8, tab. I, fig. 9 a-e. — Ascomatibus aggregatis, primo subglobosis, dein cupulatis, extus pallidulis, pilosis, margine pilis erectis, brunneis, apice obtusis v. subacutis, hyalinis, parce septatis, usque ad 200 \times 20 vestitis, disco aurantio, concavo v. subplano, levi, 1,5-2,5 mm. diam.; ascis cylindraceis, apice rotundatis, octosporis, 200-250 \times 18-18; paraphysibus filiformibus, hyalinis septatis, 3-3,5 μ . cr., apice clavatis, granuloso-guttulatis; sporidiis ellipsoideis, oblique monostichis, 14-18 \times 10-15, episporio levi, hyalino subfuscescente.

Hab. ad terram in ins. Kerguelen (E. WERTH).

SPHÆROSPORA Sacc. — Syll. VIII p. 188, XVI p. 720, XVIII p. 38.

1. *Sphaerospora confusa* (Cke.) Sacc. — Syll. VIII, pag. 190 — var. 5435 *ochracea* Rehm, Ascom. exs. n. 1731 (1907) Ann. Myc. V (1907) p. 467. — A typo differt ascomatibus pallidioribus (pallide ochraceis nec brunneo-castaneis), statura evidenter majore (usque ad 6 mm. lat.).

Hab. in area combusta prope Zülz in Pakosz Silesiae (BUCHS).

NEOTTIELLA (Cooke) Sacc. — Syll. VIII p. 190, XI p. 400, XIV p. 760, XVI p. 720, XVIII p. 39.

1. *Neottiella sericeo-villosa* Rehm, in Kellerman Journ. of Mycol. 5436 XIV (1908) p. 6. — Ascomatibus gregariis, ligno putrido insidentibus, primitus globoso-clausis, demum urceolatis, expansis, campanuliformibus, regulariter marginatis, haud stipitatis, disco cæruleo-livido, extus sericeo-villosis usque ad marginem, fuscidule cinereis, pilis simplicibus, rectis v. subcurvulis, interdum conglutinatis, obtusis, glabris, septatis, 500 μ . long., usque ad apicem æqualiter 5-7 μ . lat., subhyalinis, fragilibus obtectis, 0,5-5 cm. diam., 0,5-2 cm. alt.; hymenio plane in evoluto!

Hab. ad terram ?, Volcano Atitlán alt. 2700 m. Guatemala et in *Opuntia* Dept. Amatitlán Guatemala (KELLERMAN). — Species pulcherrima, hymenio plane carens. secundum formam et excipulum hirsutum forsitan *Neottiellæ* sp. Similis videtur *Lachnea Plumeræ* Fr. Americæ centr. Specimina in *Opuntia* lecta præbent ascos 40-46 \times 25-32, sporidia 20-22 \times 8, hyalina. « *Ægre fero, ait REHM*, me in plurimis microscopicis præparatis intra excipula crasse tunicata modo ascos dispersos ovales, sporidia plane in evoluta in cludentes invenisse ».

2. *Neottiella Höhneliana* Rehm in v. Höhnel in Ann. Myc. III (1905) 5497 p. 554, c. ic. — Ascomatibus carnosis, primum albis arescendo extus sordide albis, usque ad 1 cm. diam., disco pallide brunneolo, conchato, margine subincurvato, integro, subacuto, tomentoso; præditis, basi angustatis, intus levibus, extus minute breviter tomentoso-velutinis, pilis hyalinis, tenuibus, obtusis, 4-7-locularibus, subclavatis, 40-160 \times 20-26; ascis cylindraceis, octosporis, 270 \times 11; paraphysibus 3-4 μ . cr., supra subclavatis et usque ad 5-6 μ . cr.; sporidiis hyalinis, unilocularibus, biguttulatis, ellipsoideis, levibus, 14-15 \times 8-9. J-.

Hab. ad terram in silvis prope Pressbaum, Wiener Wald, Austria.

3. *Neottiella subhirsuta* (Schum.) Sacc., Ann. Mycol. X (1912) p. 317, 5458 *Pyronema subhirsutum* (Schum.) Fuck. — Syll. VIII, p. 108 — *Humaria subhirsuta* (Schum.) Karst., Rehm, Disc. p. 943.

Hab. in lœtamime ex foliis vinaceisque putridis formato in Horto botanico parmensi (Doct C. BIANCHI). — Ascomata subiculo omnino carentia, raro usque ad 10-11 mm. lata, saepius vero minora, extus pilis filiformibus flaccidis hyalinis septatis usque ad 350 \times 10 conspersa. Ob hanc notam et defectum subiculi vera *Neottiella*, non *Pyronema*, nec *Humaria*. *Neottiella fraudans* (Karst.) est verisimiliter hujus mera varietas.

4. *Neottiella Trabutiana* Patouill., Bull. trim. Soc. Myc. de France, 5439 vol. XXI (1905) pag. 119. — Sparsa, sessilis, primum globulosa dein aperta, 0,5 cm. diam.; disco plano-concavo, rubro-aarantiaco; ascis cylindraceis, rotundatis et apice operculatis, 180-250 \times 21-25, 8-sporis; paraphysibus cylindraceis, rectis, apice claviformi incrassatis, septatis, intus granulis aurantiacis farctis; sporidiis monostichis levibus, hyalinis, ovoideis 18-22 \times 12-15, uniguttulatis; trama cellulosa incolori; superficie externa alba, pilis hyalinis parce septatis, acutis, 180-250 \times 21-25 prædicta.

Hab. ad terram humidam muscosam prope Alger in Algeria Africæ bor. (TRABUT). — *N. Hetieri* Boud. proxima. Fibrillis hyalinis 3-5 μ . cr. crystallis incrustatis basi prædita.

SCLEROTINIA Fuck. — Syll. VIII p. 195, X p. 6, XI p. 401, XIV p. 761, XVI p. 721, XVIII p. 40.

1. *Sclerotinia Tiliæ* Reade, Ann. Mycol. VI (1908) p. 114. — Ascomatibus plerumque solitariis, cyathoideis, longe stipitatis, 0,5-1 cm. altis, ceraceis; ascis cylindraceo-clavatis, octosporis, apice rotundato-truncatis, 140-170 \times 8-10, J-; sporidiis oblique monostichis, obtuse ellipsoideis, continuis, hyalinis, 9-11 \times 4-5; paraphysibus sparsis, filiformibus, hyalinis.

• *Hab.* ex sclerotiiis in fructibus Tiliæ americanæ, Mt. Pleasant Iowa (S. J. SEAVER).

2. *Sclerotinia Corni* Reade, Ann. Mycol. VI (1908) p. 113. — Status 5441 ascophorus adhuc ignotus; status conidicus: cfr. *Monilia Corni* Reade.

Hab. in foliis Corni circinatae in silvis Ithaca, New York Amer. bor.

3. *Sclerotinia Amelanchieris* Reade, Ann. Mycol. VI (1908) p. 114. 5442 — Status ascophorus adhuc ignotus; status conidicus: cfr. *Monilia Amelanchieris* Reade.

Hab. in fructibus Amelanchieris canadensis, Junus et Malloryville New York, Amel. Botryapii, Junus New York, Amer. bor.

4. *Sclerotinia angustior* Reade, Ann. Mycol. VI (1908) p. 113. — 5443 Ascomatibus plerumque solitariis, 0,5-2 mm. altis, cyathoideis, longe stipitatis, ceraceis, extus glabris; excipulo ad exteriorem partem pseudoparenchymaticæ ad interiore prosenchymaticæ contexto; ascis cylindraceo-clavatis, octosporis, 150-160 \times 8-10, apice rotundato, J+; paraphysibus parcis, angustis, 2 μ . cr., apice usque ad 4 μ . incrassatis, septatis, hyalinis; sporidiis oblique monostichis, obtuse ellipsoideis, 10-11 \times 5-6, continuis, hyalinis; conidiis (*Monilia angustior* (Sacc.) Reade = *M. Peckiana* var. *angustior* Sacc., Syll. X, p. 517) subgloboso-citriformibus 10-20 μ . cr. plerumque 12-15 μ , continuis, hyalinis, catenulatis, disjunctioribus præditis, in maculis effusis, albido-cinereis pulvereis.

Hab. in fructibus sclerotisatis vere et in ramulis vivis æstivis *Pruni virginianæ* L., Ithaca New York Amer. bor. — *Scl. Seaveri* affinis differt matrice et chlamydosporis latioribus.

5. **Sclerotinia laxa** Aderh. et Ruhl., Arb. k. Gesundheits. Bd. IV 5444 (1905) p. 427. — Affinis *Sclerot. fructigenæ*; distinguitur cæspitulis conidiorum griseis, parvis; ascis 124-149 \times 8,5-11,8; sporidiis ellipsoideis, obtusis (nec acutis), 11,5-13,5 \times 5,2-6,9, sæpe guttulis oleosis præditis.

Hab. in fructibus mumificatis Pruni Armeniacæ in Germania. — Status conidiophorus est *Monilia laxa* (Ehrenb.) Sacc. — Syll. IV, p. 35.

6. **Sclerotinia Padi** Woron. in Mem. Acad. St. Petersb. XXXVI, 1888, 5445 p. 40 et 1895, tab. I-IV, Rehm, Disc. pag. 808. — Ascomatibus ex quoque sclerotio singulis v. raro binis, stipitatis, glabris, paleo brunneis; cupula 4-5 mm. lata, plano-concava; stipite filiformi, pro more longo, 0,5-2,5 cm. longo, 0,5-0,7 mm. cr.; ascis cylindraceis prælongis, 168 \times 10, apice rotundatis brevissime noduloso-stipitatis, octosporis; paraphysibus filiformi-clavulatis, septatis obvallatis; sporidiis in tertia ascii parte super. sitis, oblique monostichis, oblongo-ellipsoideis, biguttatis, hyalinis, 12-13 \times 6-7,5.

Hab. in sclerotii ad fructus mumificatos Pruni Padi in Rossia, Hungaria. — Status conidiophorus oritur in foliis et est *Monilia Linhartiana*. — Cfr. Woron. l. c.

7. **Sclerotinia Aucupariæ** Woron. in Mém. Acad. imp. Sc. St. Petersb. 8 sérs., II 1 (1895) p. 15, t. 5 et in Zeitschr. f. Pflanzenkr. V (1895) pag. 134, t. 4. — Ascomatibus dilute brunneis, glabris, stipitatis; cupula 5-7 mm. lata, leviter concava, stipite 5-7 mm. longo, 0,5-0,7 mm. cr., filiformi, sæpe tortuoso, basi arrhizo; ascis cylindraceis apice rotundatis, brevissime noduloso-stipitatis; sporidiis in ascii tertia super. parte sitis, oblique monostichis, 11 \times 5,5, hyalinis, biguttulatis, oblongo-ellipsoideis, utrinque rotundatis; paraphysibus filiformi-clavulatis, septatis.

Hab. in fructibus mumificatis Sorbi aucupariæ in Fennia (WORONIN) et in Erzgebirge (LUDWIG). — Ex quoque fructu oriuntur 1-4 ascomata. In foliis generatur st. conidiophorus, idest *Monilia Linhartiana* species affinis. Cfr. Woron. l. c. cum icon.

8. **Sclerotinia Crataegi** Magnus in Ber. Deutsch. Bot. Gesell. (1905) 5447 p. 197, t. V — Cfr. Syll. XVIII, p. 503. — Ascomatibus longe stipitatis, brunneis; stipite tortuoso, irregulariter cylindraceo, 2-3 cm. longo, 1,5 mm. cr., sæpe noduloso, cupula mox explanato-convexa, margine involuta, passim incisa 3-8 mm. lata; ascis cylindraceis, 170 \times 10-11, p. sporif. 65 μ . longa, octosporis; sporidiis ellipsoideis, utrinque acutiusculis, 10-10,5 \times 5-5,2, hyalinis, faretis.

Hab. in fructibus immaturis mumificatis et sclerotisatis *Cra-tægi Oxyacanthæ* in Thuringia (DIEDICKE), Silesia (EIDAM), Bo-russia (LAUBERT). — Status conidiophorus foliicola: *Monilia Cra-tægi* Died. — Syll. l. c. — In fructibus oritur quoque alia forma conidiophora. Cfr. Magn. l. c. t. V, f. 8.

9. **Sclerotinia Mespili** Woron. in Berichte Deutsch. bot. Gesell. IX 5448 (1891) p. 103 et Rehm Disc. p. 809 (st. conid.), Schellenberg in Centralbl. Bakt. II Abt. XVII (1907) p. 188, t. I-II (st. ascoph.). — Ascomatibus gregariis, breviter stipitatis, glabris; cupulis concavis 2,5 mm. latis; stipite cylindraceo, saepe curvulo, 5 mm. long., 1 mm. cr.; ascis cylindraceis, apice rotundatis, deorsum sensim tenuato-stipitatis, octosporis, paraphysibus filiformi-clavulatis, septatis obvallatis, 160-180 \times 10-12; sporidiis in medietate asci sup. sitis, oblique monostichis ellipsoideis, hyalinis, levibus, 12-14 \times 8-9.

Hab. in fructibus mumificatis germinantibus *Mespili germanicae*, Lugano, M. Bré, M. Generoso, Poschiavo Grigioni et in insula Mainau lacus Constantiae, Helvetia. — Status conidiophorus est *Ocularia necans* Pass. quæ occurrit in foliis *Mespili* quoque in Italia et Franconia.

10. **Sclerotinia Cydoniae** Schell. in Centralbl. Bakt. II Abt., XVII 5449 (1907) p. 189, *Stromatinia Linhartiana* Prill. Mal. pl. agric. II, p. 439, cum figg., excl. syn. — Ascomatibus solitariis v. 3-5-aggregatis, e brunneo cinereo-violaceis, stipitatis; cupulis plano-concavis, tenuiter marginatis, 0,5-1 cm. lat.; stipite breviusculo, cylindraceo, 1-1,5 cm. longo, in cupulam sensim dilatato; ascis cylindricis apice truncatis, 168 μ . longis, paraphysibus bacillari-clavulatis pseudoseptatis obvallatis, octosporis; sporidiis in asci medietate sup. oblique monostichis, ellipsoideis, hyalinis, 12 \times 7-7,5.

Hab. in fructibus mumificatis *Cydoniae vulgaris* in Gallia, Helvetia, Italia. — Status conidicus nascitur in foliis et refert *Monilia* speciem peraffinem *M. Linhartianæ*. Cfr. Prill. l. c.

11. **Sclerotinia Seaveri** Rehm, Ascom. Amer. bor., Ann. Myc. v. III 5450 (1905) p. 519; Ann. Myc. IV (1906) p. 66; Ascomyc. (1906) n. 1633; Reade in Ann. Mycol. VI (1908) p. 112. — Ascomatibus plerumque solitariis in putamine sessilibus, longe stipitatis, primitus cya-thoideis, dein patellaribus, disco orbiculari, distincte marginato, flavidulo, 5-10 mm. diametro, margine tenuissime crenulato, excipulo cum stipite glabro, fuscidulo, stipite cylindrico, curvatulo, 0,4-0,5 mm. lat, versus ascoma et basim subcrassiore, 1-2 cm. longo, siccis, extus cinereo-fuscidulis; excipulo prosenchymatico;

ascis cylindraceis, apice rotundatis et incrassatis, 120-140 \times 6-8, octosporis; poro jodo immutato; sporidiis obtuse ovoideis, 1-cellularibus, plerumque guttulis oleosis 2 instructis, hyalinis, 10-12 \times 4,5-5, monostichis; paraphysibus sparsis, filiformibus, 2 μ ., ad apicem 4 μ . cr., hyalinis; conidiis subgloboso-citriformibus, continuis, hyalinis, 7-15 μ ., plerumque 8-10 μ ., catenulatis, disjunctoribus præditis, in maculis effusis, albido-cinereis, pulvereis, epiphyllis (*Monilia Seaveri* Reade).

Hab. ad putamina Pruni serotinæ in terra putrescentia locis humidis silvarum, Iowa City, Iowa Amer. bor. (SEAVER). — Verisimiliter ex cotyledonibus sclerotici oritur. — *Sclerotinia Pruni-spinosa* (Lib.) Speg. et Roum. in foliis exsicc. est plane diversa. 5451

12. *Sclerotinia Cerasi* Woron. Mém. Ac. St. Pétersb. XXXVI (1888) p. 39; Rehm, Discom. in Rabenh. Krypt., Fl. III (1896) p. 809.
— Status sclerotialis et conidicus tantum sed imperfecte noti.

Hab. in fructibus mumificatis Pruni Cerasi in Finlandia.

13. *Sclerotinia Polycodontis* Reade, Ann. Mycol. VI (1908) p. 110. 5452
— Ascomatibus 1-4, cyathiformibus, longe stipitatis, 1-3,5 cm. altis, ceraceis, extus fuscidulis quasi glaucis; ascis cylindraceo-clavatis apice rotundato-truncatis, 200-240 \times 10-14, J +; sporidiis 8, obtuse ellipsoideis, 15-20 \times 10-12, continuis, hyalinis, biguttulatis monostichis; excipulo prosenchymatice contexto; chlamydosporis catenulatis disjunctoribus præditis, subgloboso-citriformibus, 15-16 \times 11-13, hyalinis, continuis, in maculis effusis, albido-cinereis, pulvereis (*Monilia Polycodontis* Reade n. f.) paraphysibus paucis, angustis, simplicibus, 2 μ . crassis., apice incrassatulis, septatis, hyalinis.

Hab. in fructibus sclerotisatis ramulisque vivis Polycodontis staminei, in silvis humidis Ithaca New York Amer. bor.
— A *Scl. Vaccinii-corymbosi* differt matrice et chlamydosporis minoribus.

14. *Sclerotinia Vaccinii-corymbosi* Reade, Ann. Mycol. VI (1908) 5453
p. 109. — Ascomatibus 1-7, ceraceis, longe stipitatis, 1-3,5 cm. altis, cyathiformibus, tenuiter marginatis, extus fuscidulis quasi glaucis; ascis cylindraceo-clavatis, apice rotundato-truncatis, 200-260 \times 10-12, J +; paraphysibus angustis, parcis, simplicibus, 2-3 cr., apice incrassatulis, septatis, hyalinis; excipulo prosenchymatico; sporidiis 8 obtuse, ellipsoideis, continuis, hyalinis, 14-18 \times 9-10, oblique monostichis; chlamydosporis catenulatis disjunctoribus præditis, subgloboso-citriformibus, hyalinis, 28-32 \times 19-25, in

maculis effusis, albido-cinereis, pulvereis (*Monilia Vaccinii-corymbosi* Reade n. f.).

Hab. status ascophorus in fructibus sclerotisatis *Vaccinii corymbosi* vere, status chlamydosporicus in ramulis vivis inflorescentiisque aestivis, in sphagneto, Malloryville New York Amer. bor. — *Scl. Vaccinii* Wor. affinis, differt matrice, ascomatibus semper fructicolis, chlamydosporis minoribus.

15. **Sclerotinia Ocyymi** Voglino, in Ann. R. Acc. Agric. Torino LII 5454 (1909) p. 284, in Atti R. Accad. Scienze Torino (1910) p. 265, f. 1. — Stipitata, minuta, carnosoceracea, castaneo-violacea; stipite tenue, cylindraceo, 2-2,5 mm. longo, ad basim atro, sursum castaneo-violacea; cupula minuta cyathiformi, 1,5-2 mm. lata, castaneo-violacea; ascis cylindraceo-clavatis, 8-sporis, 55-70 \times 6-8; sporidiis ovoideis, hyalinis, 5-8 \times 4-5, raro 6; paraphysibus filiformibus, supra clavato-incrassatis, 70-75 \times 2-4.

Hab. in sclerotio, ad caules *Ocyymi* Basilici quod morbo affectur, Venaria Reale, Torino Italæ bor.

16. **Sclerotinia Plöttneriana** Kirchst., in Rehm, Ascom. exsicc. n. 1603 5455 (1905) et Bot. Ver. Brandenb. XLVIII (1906) p. 43. — Ascomatibus ex seminibus matrix sclerotiatis nigricantibus orientibus, 1-4 aggregatis, longe pedicellatis, pedicello 1-10 mm. longo et 0,5 mm. cr., pallide v. obscure brunneo; disco concolori primum globoso-clauso, dein applanato v. plus minus infundibuliformi, 2-3 mm. circ. lato, acute marginato; ascis cylindraceis, 160-180 \times 10-12, breviter et crasse pedicellatis, supra rotundatis, octosporis; sporidiis hyalinis, monostichis, unilocularibus, ovoideis, quandoque inaequilateris, 1-2-guttulatis, 15-18 \times 6-7; paraphysibus filiformibus, hyalinis, continuis, 3 μ . circ. cr.

Hab. in seminibus *Veronicae hederifoliae*, pr. Rathenow et Gross-Behnitzer Hasellake Germaniae.

17. **Sclerotinia hirtella** Boud., Icon. Mycol. t. III, pl. 471 (1907); 5456 Hist. et Classif. Discomyc. Europe (1907) p. 107. — Minuta, gracilis, stipitata, 5-10 mm. alta, tota pallide ochraceo-cinerella, e sclerotio nigro, oblongo enata; cupulis infundibuliformibus, dein applanatis plus minusve longe stipitatis, extus undique, ut pedicello, pallide hirtis, hymenio concolore; pilis acutis, flexuosis, septatis, simplicibus aut bifidis, 90-11 \times 4; ascis cylindrico-clavatis, octosporis, 90-115 \times 7-8; paraphysibus linearibus ad apicem pauculum incrassatis, albis; sporidiis ovoideo-oblongis, albis, hyalinis,

intus non granulosus, 7-9 \approx 4-5; sclerotio nigro, sulcato, oblongo saepe curvato, 2-4 \approx 1,5, uni- aut pluricupulifero.

Hab. ad folia et ramulos putres Castaneæ in silva Montmory Galliæ. — *Scl. Candolleance* affinis a qua differt sclerotio oblongo et pilis.

18. **Sclerotinia Bresadolæ** Rick in *Österr. bot. Zeitschr.* L (1900), 5457 p. 121. — Ascomatibus gregariis e sclerotio exterius nigro, interius albescente, rugoso, ovali, fere sphærico, 2 mm. diam. proventibus; primitus calyciformibus, demum disciformibus, margine tenero, hyalino-fuscis v. pallidis, stipite tenuissimo filiformi, 1-5 cm. longo, villosi, versus discum fere lanuginoso, 1-5 cm. latis, ceraceis, mollibus; ascis cylindraceis 70-80 \approx 6-7, octosporis, poro rotundato jodo cœrulescente; sporidiis ovoideis, uno apice paulo latioribus, hyalinis, 6-8 \approx 3-4; paraphysibus hyaliniis, filiformibus, versus finem 3 μ . latis.

Hab. in gemmis Quercus putrescentibus ope Dryoteratis terminalis transformatis, Valkenburg, hollandice Limburg. — *Scl. Candolleance* (Lév.) affinis.

19. **Sclerotinia rathenowiana** Kirschst., in Rehm Ascom. exsicc. n. 1649 5458 (1905) et in Verh. bot. Ver. Prov. Brandenb. XLVIII (1906) p. 43. — Sclerotiis in cortice immersis demum secedentibus, variabilibus, intus extusque nigris, superficie nitidis; ascomatibus pedicellatis, pedicello usque ad 3 cm. et ultra long., 0,5 mm. cr., primum albo pulveraceo dein nudo, rubido- v. griseo-brunneo; ascomatibus ceraceis pallide brunneo-griseis, siccis brunneoli, usque ad 6 mm. latis, primum infundibuliformibus, dein applanatis demumque revolutis, tenuibus; ascis cylindraceis, 110-130 \approx 6-8, breviter pedicellatis, supra applanatis incrassatisque, octosporis, monostichis, ellipsoideis, quandoque inæquilateris, eguttulatis, unilocularibus, hyalinis, 7-11 \approx 4-5; paraphysibus filiformibus, hyalinis, septatis, supra usque ad 3 μ . incrassatis.

Hab. in ramulis salicinis putrescentibus prope Rathenow Germaniæ.

20. **Sclerotinia Alni** Maul, Hedw. XXXIII (1894) p. 215, t. XI-XII, 5459 Rehm, Disc. p. 1237. — Ascomatibus . . . ignotis; sclerotiis in acheniis Alni orientibus et sat deformantibus, parum extantibus; conidiophoris ex sclerotio achenioque connato hinc inde dense cæspitose erumpentibus, ex albo virescentibus et *Spicariae* speciem (*S. Alni* Sacc.) sistentibus: conidiophoris primariis erectis, 4 μ . cr. filiformibus, parce septatis, subinde furcatis, sursum verticillato-

ramosis, verticillis plerumque binis inter se remotis (non penicillioideis) ramulis quaterno-quinis, sensim tenuatis, apice sporigeris; conidiis in catenulas senis-octonis dispositis, inæqualiter ellipsoideis, subangulosis, hyalinis, levibus, $1,7-2 \approx 1,5$.

Hab. in acheniis *Alni glutinosæ*, Reinhardsaу Germaniae (REES).

21. **Sclerotinia Coryli** Schell. in Ber. Deutsch. Bot. Gesell. (1906) 5460 p. 505, t. XXI. — Ascomatibus solitariis v. raro binis, longe stipitatis; cupulis infundibuliformibus concaviusculis dein subplanis 8-12 mm. latis, ambitu acutiusculis, ceraceis, lâte brunneis, disco pallidiore; stipite filiformi usque ad 5 cm. longo, 2 mm. cr., glabro, filiformi, sâpe leviter tortuoso; ascis cylindraceis, apice rotundatis deorsum sensim et longe tenuato-stipitatis, 140-160 \approx 10-12, paraphysibus filiformi-clavulatis, parce septatis, raro furcatis; sporidiis oblique monostichis, ovoideis, utrinque obtuse tenuatis, 15-16 \approx 8, hyalinis, intus granulosis, levibus.

Hab. in amentis masculis *Coryli Avellanae*, ex eorum axi sclerotisato proveniens, pr. Poschiavo, Grigioni.

22. **Sclerotinia Betulæ** Woron., Mem. Acad. Sc. St. Petersb. XXXVI 5461 (1888) n. 7, Nawaschin, Sclerot. Betulæ, St. Petersb. 1893, p. 32, t. I-IV, Tubeuf, Pflanzenkr. pag. 274, cum icon. — Ascomatibus solitariis v. binis, disco 0,5-1,5 cm. longo, 1-1,5 mm. lato, initio infundibuliformi dein cupulato, 1-4 mm. lato, flavo v. subcarneo, recto v. obliquo, cylindraceo, stipite basi rhizoidibus prædicto ascis octosporis; sporidiis

Hab. in fructibus *Betulæ* in Germania.

23. **Sclerotinia Galanthi** Ludw. Lehrb. nied. Kryptog. p. 355 (1892) 5462 Rehm, Discom. p. 820 in Rabenh. Krypt. Fl. III (1896). — Status sclerotialis et conidicus tantum sed imperfecte noti.

Hab. in foliis floribusque *Galanthi nivalis*, Mecklenburg Germaniae.

24. **Sclerotinia Paridis** (Boud.) Sacc. et Trav. — Syll. XX, p. 766 — 5463 *Stromatinia Paridis* Boud., Icon. Mycol. tab. III, pl. 479 (1905), Hist. et Classif. Discom. Europe pag. 108 (1907). — Major, stipitata, 1-2 cm. lata, fulvo-cinnamomea, pediculo flexuoso nigrescente longiore; cupulis primo infundibuliformibus, dein plus minusve applanatis, extus glabrescentibus, margine dentato; ascis minutis, cylindricis, inoperculatis, octosporis, 130-140 \approx 8-10; paraphysibus linearibus, ad apicem non incrassatis, 2-3 μ . cr., hyalinis;

sporidiis oblongo-ovoideis, inaequilateralibus, hyalinis sed intus guttulis oleosis pluribus ad extremitates repletis, 10-13 \approx 4-6.

Hab. in radicibus denigratis Paridis quadrifoliæ in argillosis silvaticis Ecouen Galliæ.

25. **Sclerotinia vesicaria** Giesenh., Ber. Bayr. Bot. Ges. XI (1907) 5464
 p. 169. — Sclerotiis irregulariter cylindraceis, rugosis, nigris, intus albidis, 5-8 mm. long., 2 mm. latis; ascomatibus singularibus vel pluribus pallide fulvis v. cinnamomeis, stipitatis, stipe 2-8 mm. long., 0,5-1 mm. cr., subtus tomentoso, disco cupulæformi 3-4 mm. diam., levi, disco cinnamomeo; paraphysibus numerosis filiformibus ad apicem vix incrassatis, 2 μ . cr.; ascis tenuibus cylindraceis, octosporis, 180-190 \approx 9; sporidiis fusoideis, hyalinis, 12 \approx 4.

Hab. inter utriculos dejectos emortuos Caricis vesicariæ, autumno oriens, ad Stechsee prope Seehaupt Bavariæ. — A ceteris *Sclerotiniæ* speciebus caricicolis satis diversa. Teste cl. Magnus *Cintractia Caricis* (Pers.) Magn. est species autonoma, non *Sclerotiniæ* st. conidiophorus ut opinatur cl. Giesenhangen.

26. **Sclerotinia Lindaviana** Kirschst. in Rehm, Ascom. exs. n. 1604 5465
 (1905) et in Verh. Bot. Ver. Prov. Brandenb. XLVIII (1906) p. 42.
 — Sclerotiis foliicolis v. vaginicolis, angustis, depressis, irregulibus, nigris, saepe concrecentibus, 1 cm. long., 0,5 cm. crassis; ascomatibus flavo-brunneolis, longitudine variabilibus, pedicello $\frac{1}{4}$ mm. cr., pruinoso; ascomatibus 2 mm. circ. diam., primum globoso-clausis dein applanatis, acute marginatis; disco plerumque pallidius colorato; excipulo prosenchymatico, brunneo; ascis cylindraceis, pedicellatis, 40-45 \approx 4, octosporis; sporidiis oblique monostichis, hyalinis, ovoideis, plerumque irregularibus, eguttulatis, 4-5 \approx 1,5-2; paraphysibus filiformibus, hyalinis, 1,5 μ . cr.

Hab. in foliis vaginisque putrescentibus Phragmitis communis, Gross-Behnitzer See et prope Rathenow Germaniæ.

27. **Sclerotinia Menieri** Boud., Icon. Mycol. tom. III, pl. 475 (1907), 5466
 Hist. et Classif. Discomyc. Europe (1907) p. 108. — Minuta, pediculata, fulva, pediculo elongato glabro fuliginoso, supra pallidore, e sclerotio, primo rotundato, tomentoso, albido dein rufescente; ascis octosporis inoperculatis, foramine marginato jodo cærulescente, cylindraceis, 120-130 \approx 8-10; paraphysibus tenuibus, non granulosis, ad apicem vix incrassatis, 4 μ . cr.; sporidiis ovatis, hyalinis, intus guttula minuta subcentrali rarius divisa præditis, 12-14 \approx 6-7.

Hab. in paludosis in foliis primum vivis Phalaridis arundinaceæ Nantes, Gallia (MENIER).

28. **Sclerotinia Fuckeliana** De By. — Syll. VIII, pag. 196 — var. 546.
Jeanpertii Boud., Icon. Mycol. t. III, pl. 469 (1907), Hist. et Clas-
 sif. Discomyc. Europe (1907) p. 107. — Pro genere media, fusco-
 badia, e sclerotio cylindrico-diformi enata, paraphysibus cylindri-
 cis, ascis longioribus, a typo diversa.
Hab. in paludosis ad ripas Loing Galliæ (M. JEANPERT).
29. **Sclerotinia wisconsinensis** Rehm, Ann. Mycol. VI (1908) p. 317. 5468
 — Ascomatibus e sclerotio suborbiculari subtus convexulo, in supe-
 riore parte plus minusve plano vel umbilicato; extus nigro, intus
 albo, secco corrugato, 3-6 mm. lato, 2,5-3 mm. crasso, 2-5, rarius
 singulis orientibus, primitus sphæroideis, demum disciformibus, te-
 nuiter marginatis, 1,5-3 mm. latis et altis, flavo-brunneis, glabris,
 senilibus fusco-brunneis, longe stipitatis; stipite cylindraceo, ca.
 0,15-0,2 mm. lato, infra excipulum subcrassiore, 2-3 cm. longo,
 glabro, curvatulo, erecto, flavo-brunneolo; ascomatibus siccis cum
 stipite longitudinaliter corrugatis, disco albido-conperso; ascis cla-
 vatis, apice rotundatis, 150-180 \times 12-15, octosporis, jodo cœrule-
 scens; sporidiis fusoideis, utrinque plus minusve rotundatis,
 plerumque 1-2 guttis oleosis magnis præditis, hyalinis, 20-22 \times 7,
 mono- rarius distichis; paraphysibus filiformibus, prominentibus,
 obtusis, septatis, hyalinis, 3-4 μ . crassis.
Hab. in silvis humidis ad terram fragmentis ligneis mixtæ
 Madison Wisc. Amer. bor. (E. G. ARZBERGER). — A *Sclerotinia*
gracili recedit sclerotiis sporidiisque minoribus.
30. **Sclerotinia sclerotiorum** (Lib.) Sacc. et Trott. — Ita vocanda est 5469
Peziza sclerotiorum Lib. Crypt. exs. IV, n. 326 (1837), *Sclerotinia*
Libertiana Fuck. Symb. p. 331 (1869) — Syll. VIII, p. 196 (ubi
 alia synonyma), *Peziza Antzii* Münter in Bull. Acad. Sc. Belg. XI
 (1861) p. 222, f. 1-5.
31. **Sclerotinia nyssogena** (Ellis) Rehm, Ann. Mycol. IV (1906) p. 338. 5470
 — Ita vocanda *Peziza nyssogena* Ellis seu *Ciboria nyssogena* (El-
 lis) Sacc. — Syll. VIII, p. 207.
Hab. in drupis vetustis Nyssæ multifloræ sub foliis co-
 cervatis in Amer. bor.
32. **Sclerotinia Johnsonii** (E. et E.) Rehm, Ann. Mycol. IV (1906) 5471
 p. 338; Reade Ann. Myc. VI (1908) p. 111. — Ita vocanda: *Ci-
 boria Johnsonii* E. et E. (Proc. Acad. Phil. (1894) pag. 348 —
 Syll. XI, p. 402.

Hab. in fructibus dejectis Mali in Amer. bor. — Sec. Reade

1. c. *Monilia Crataegi* Died. hujus esset st. conidiophorus, qui potius ad *Scl. Crataegi* P. Magn. spectat. Cfr. n. 8.
 33. *Sclerotinia aconitincola* Rehm, (Esterr. bot. Ztschr. LVI (1906) 5472 p. 347. — (Nomen nudum).
Hab. in caulis siccis Aconiti sp. Schrofenpass, Algovia.

CIBORIA Fuck. — Syll. VIII p. 201, XI p. 402, XIV p. 762, XVI p. 723, XVIII p. 45.

1. *Ciboria Fagi* Jaap, Fungi sel. exsicc. n. 353, Abh. Bot. Ver. Prov. Brandb. LII (1910) Extr. pag. 3. — Ascomatibus tenuibus, pure albis, solitariis, sed in squamis gemmaceis gregariis, initio infundibuliformi-dein disciformi-dilatatis, 0,4-0,6 mm. lat.; stipite gracillimo ad 8 mm. long.; ascis tereti-clavatis, rotundatis, subincrassatis, 48-52 \times 4,5-5,5, octosporis; sporidiis elongato-ellipsoideis v. clavatis, rotundatis, continuis, saepe biguttulatis, 6-8,5 \times 2-2,5, mono- v. distichis, oblique dispositis; paraphysibus filiformibus, obtusis, hyalinis; ascis poro jodi ope cærulecentiæ.

Hab. in squamis putrescentibus gemmarum Fagi silvaticæ, Schleswig-Holstein Germaniæ.

2. *Ciboria argentinensis* Speg., Myc. Argent. IV, in An. Mus. Buenos Aires (1909) p. 444. — Mediocris, ochroleuca, subtenuis, coriacella, orbicularis, glaberrima, 5-20 mm. diam., margine integerrimo breviter pedicellata, pedicello vix obscuriore 3-5 mm. long., 1-1,5 mm. cr.; ascis jodo immutatis, linearibus, paraphysatis, truncatis, 200-220 \times 14, stipite 60-100 μ . long.; sporidiis octonis, elliptico-navigularibus, utrinque acutis, monostichis, 26 \times 11, saepius conspicue 2-guttulatis.

Hab. ad ramos dejectos putres Celtidum in sepibus pr. Tucuman, Argentina.

3. *Ciboria fusco-cinerea* Rehm, Ann. Mycol. VII (1909) pag. 525, 5475 Ascom. exsicc. fasc. 45, n. 1853. — Ascomatibus gregariis, sessiliibus, primitus globoso-clausis, dein cyathoides, demum disco plus minusve explanato, orbiculari, tenuissime marginato, interdum medio umbilicato, 0,3-1 cm. diam., extus glabris cum stipite cylindrico, versus basim attenuato et fuscenscente, 1-5 cm. longo, 0,5-0,7 mm. lato, hyalino-cinereis, demum alutaceo-fuscidulis, ceraceis, prosenchymatice contextis; ascis cylindraceis, apice rotundatis et incrassatis, 150 \times 10-12, 8-sporis, jodo cærulecentibus; sporidiis oblongo-clavatis, apice superiore obtusis, saepe subcurvatis, 1-cellularibus, gutta magna centrali oleosa instructis, hyalinis, 20-24 \times 5-6,

monostichis; paraphysibus filiformibus, septatis, hyalinis, 2,5 μ . apice obtusis, 3 μ . cr.

Hab. ad ligna Coniferarum humo obtecta, putrescentia in silvis prope Krohnes Lake et Perrys Swamp, Algoma Wisc. U. S. A. (B. A. DODGE).

4. **Ciboria acicola** Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) 5476 p. 42. — Ascomatibus solitariis, pedicello tenui c. 0,5 mm. diam., 4-5 mm. long., obscure griseo-brunneo, infra nigricante, primum globoso-clausis mox discoideis, acute marginatis, 2 mm. diam.; disco ceraceo pallidiore extus obscuriore; ascis cylindraceo-clavatis, breviter pedicellatis, 90 \times 8, octosporis; sporidiis oblique monostichis, hyalinis, eguttulatis, unilocularibus, ellipsoideis, 8-10 \times 3-4; paraphysibus hyalinis, filiformibus, supra claviformi incrassatis.

Hab. in foliis putrescentibus *Abietis* (*Piceæ*) excelsæ, Gross-Behnitzer Park Germaniæ.

5. **Ciboria Hedwigiae** (Kirschst.) Sacc. et Trott., *Rutstroemia Hedwigiae* 5477 Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) p. 41. — Ascomatibus solitarius v. confertis, pedicellatis; pedicello basi brunneo-nigro incrassato, supra pallide flavo-brunneo, nitidulo, levi, indistincte striato, 3-4 mm. long., circ. 0,5 mm. cr.; ascomate primum globoso clauso, dein aperto et acute marginato, demum applanato, rubro-brunneo, 1-1,5 circ. mm. diam.; excipulo brunneo, prosenchymatico, cellulis marginalibus filiformibus; ascis clavatis supra rotundatis, basi in pedicellum tenuatis, crasse tunicatis, octosporis, 140-170 \times 16-18; sporidiis irregulariter distichis, hyalinis, granuloso-farctis, ellipsoideis vel oblongis, quandoque fere clavatis, primum 1- dein 2-septatis, 16-22 \times 6-8; paraphysibus filiformibus, vix $\frac{1}{4}$ μ . cr., ramosis, hyalinis, supra brunneolis et usque ad 2 μ . cr.

Hab. parasitice inter foliola *Rhacomitrii canescens*, in silvis prope Rathenow Germaniæ.

6. **Ciboria scoparia** Rehm in Jaap, Abh. bot. Ver. Prov. Brandenb. LII (1910) p. 113. — (Nomen nudum).

Hab. in leguminibus putrescentibus *Sarothamni scoparii* prope Triglitz, Brandenburgia.

CHLOROSPLENIUM Fr. — Syll. VIII p. 315, X p. 12, XI p. 407, XIV p. 773, XVIII p. 65.

1. **Chlorosplenium atro-viride** Bres., in Rick Fungi austro-amer. III, 5479

u. IV, n. 64, Ann. Myc. v. IV (1906) pag. 311. — (Nomen nudum).

Hab. in ligno in Brasilia, America austr.

HELOTIUM Fr. — Syll. VIII p. 210, X p. 6, XI p. 402, XIV p. 762, XVI p. 726, XVIII p. 47.

1. **Helotium Staudtii** P. Henn., Engl. Jahrb. XXXVIII (1905) p. 128. 5480

— Ascomatibus gregariis, ceraceo-carnosis, subsessilibus, primo sub-turbinato-cupulatis, dein subdiscoideis, marginatis, extus pallide pruinosis, margine integro v. crenulato, 0,4-0,8 mm. diam., disco concavo v. plano, flavidio-brunneolo; ascis clavatis, apice obtuse rotundatis, octosporis, 30-45 \times 3-5; paraphysibus filiformibus, septatis 1,5-2 μ . cr.; sporidiis oblique mono- v. subdistichis, clavatis v. subfusoideis minute 2-guttulatis, hyalinis.

Hab. in superficie interna corticis Baphiæ, Lolodorf Kamerun Africæ centr.

2. **Helotium Verbenæ** Cavara, Rev. Mycol. XI (1889) p. 178, t. 88 bis, 5481 f. 2. — Ascomatibus sparsis, stipitatis, firmis, majusculis, cupula primo infundibuliformi, demum expansa, pallide lutea, tomentosa, margine crenato-fimbriato, 1-2,5 mm. alta, disco plano levi, initio luteo dein ochraceo; stipite 1,5-3 mm. alto, crassiusculo, basi lutescenti, superne albicante; ascis cylindraceo-clavatis, 100-110 \times 9-10, octosporis; paraphysibus filiformibus, continuis; sporidiis clavatis, leniter curvis, unicellularibus, monostichis, utrinque v. tantum basi cilium gerentibus, 20-22 \times 4-5.

Hab. in caule emortuo Verbenæ officinalis, Pavia in Italia boreali.

3. **Helotium nubilipes** Boud., Icon. Mycol. t. III, pl. 491 (1907), Hist. 5482 et Classif. Discomyc. Europe (1907) p. 111. — Medium, albidum,

3-5 mm. altum, totidem latum, stipite elongato, minutissime puberulo, ad basim nigrescente, cupula marginata dein plana, extus glabra; ascis clavatis, octosporis, 140-160 \times 12-13, foramine marginato; paraphysibus linearibus, ad apicem paululum incrassatis, granulosis, 5-6 μ . cr.; sporidiis majoribus, 22-34 \times 5-6, clavæformibus, antice rotundatis, ad basim acutiusculis, albis, intus guttulis inæqualibus præsertim ad extremitates repletis.

Hab. in paludosis sub caulibus Cirsii oleracei, Montmorency, Gallia.

4. **Helotium herbarum** (Pers.) Fr. — Syll. VIII, p. 217 — (= *Phiala Hymenula* (Fuckel) Sacc., Syll. VIII, p. 262) — var. *Tanaceti-* 5483

vulgaris C. Mass., Osserv. fitol. in Madonna Verona v. II (1908) p. 10. — Ascis 4,5 μ . cr.; sporidiis subfusoideo-cylindraceis, hyalinis, 10-12 \times 3.

Hab. in caulis siccis *Tanaceti vulgaris*, prope Bolca in agro Veronensi Ital. bor.

5. *Helotium consobrinum* Boud., Icon. Mycol. t. II, pl. 488 (1907), 5484 Hist. et Classif. Discomyc. Europe (1907) p. 114. — Majus, 2-3 mm. altum, 1-1,5 mm. latum, luteum, pediculo pallidiore ad basim incrassatam albo-villosulo, cùpula applanata margine integro, extus glabra; paraphysis linearibus, ad apicem vix incrassatis, granulosis, lutescentibus, 3-4 μ . crassis; ascis octosporis, clavatis, 70-90 \times 8-10; spòridiis fusoidelis, extremitatibus æqualiter acutiusculis, albis, intus ad apices minutissime granulosis, hyalinis dein (spurie?) uni-septatis, 15-26 \times 3-5.

Hab. in caulis putrescentibus *Rumicis*, Montmorency Gallia. — Ab *H. virgultorum* et *H. scutula* differt sporidiis et pediculo basi incrassato.

6. *Helotium marmolense* Speg., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) p. 445. — Pusillum, coccineum, tenue, sparsum, orbiculare, plane sessile, concaviusculum, 2-3 mm. diam., subceratum, extus ferrugineum; ascis e cylindraceo subclavulatis, apice obtusis 40-45 \times 5, octosporis, breviter pedicellatis, filiformi-paraphysatis, jodo immutatis; sporidiis ellipsoideis, minutis, utrinque acutiusculis et minutissime 1-guttulatis. 8-10 \times 3-4 hyalinis, lenissime inæquilateris.

Hab. ad ramos aridos putrescentes *Macluræ aurantiacæ* Marmol pr. Buenos Aires, Argentina.

7. *Helotium ascophanoides* (Boud.) Sacc. et Trav. — Syll. XIX p. 837 5486 *Pachydisca ascophanoides* Boudier, Icon. Myc. (1905) t. III, pl. 438, Hist. et Classif. Discom. Europe (1907) p. 93. — Minutissimum, sessile, 0,25-0,40 mm. latum, albido-ochraceum, subhyalimum, lenticulare, hymenio ascis granuloso; paraphysis crassis, simplicibus, ad apicem subincrassatis, 4-4,5 μ . cr. intus minute granulosis, ad basim tantum septatis; ascis clavatis, octosporis, foramine marginato dehiscentibus, 80-90 \times 12-13; sporidiis oblongis, albis, intus grosse granulosis, ad apices subobtusis, sèpe curvulis, 13-15 \times 3,5-4.

Hab. in ligno populino putri, Montmorency, Gallia.

8. *Helotium Boudieri* Sacc. et Trott., *Calycella ochracea* Boud., Icon. 5487 Mycol. t. III, pl. 442 (1907), Hist. et Classif. Discomyc. Europe

(1907) pag. 95, non *Helot. ochraceum* (Grev.) Phill. — Minutum 1-1,5 mm. latum, ochraco-fulvescens, vix stipitatum, cupulis subconcavis, levibus, varie undulatis, hymenio vix saturatiore; paraphysibus linearibus ad apicem subincrassatis, simplicibus aut divisis, intus granulosis, hyalinis, 2 µ. cr.; ascis clavatis, octosporis, 140-150 × 8-10; sporidiis hyalinis, fusoideis aut fusoideo-clavatis, intus vix granulosis, 6-10 × 3-4.

Hab. in ligno corylino putri, Montmorency, Gallia.

9. *Helotium conscriptum* Karst. — Syll. VIII, p. 231 — var. *oblongo-gleporum* Rehm, Sydow, Ann. Mycol. V (1907) p. 397; Mycoth. germ. n. 601. — Ascis cylindraceis, 90-120 × 7-9, octosporis; sporidiis oblongo-cylindraceis, rectis, utrinque rotundatis, continuis, utroque apice minime guttulatis, hyalinis, 12-15 × 4-5, monostichis.

Hab. ad ramulos Salicis cinereæ emortuos, Buch pr. Berbau Germania (H. Sydow). — Sporidiis oblongatis nec ovoideis a typo dignoscitur.

10. *Helotium sparsum* Boud., Icon. Mycol. t. III, pl. 495 (1907), Hist. 5489 et Classif. Discomyc. Europe (1907) p. 111. — Minutum, album 0,5-1,5 mm. latum, breviter stipitatum, pediculo concolore; ascis sat amplis, clavatis, octosporis, 120-125 × 14; paraphysibus linearibus, ad apicem granulosis, albis, 4-5 µ. cr.; sporidiis oblongo-fusoideis, ad apices intus granulosis, albis, 15-21 × 5-6, sèpè curvulis.

Hab. ad folia quercina putrida, Montmorency, Gallia. — *H. amenti* affine, a quo differt statura majori, sporidiis diversis; ab *H. annulari* differt pediculo brevi sed distincto.

11. *Helotium Humuli* (Lasch) De Not. — Syll. VIII, p. 243 — var. *minusculum* Rehm, in Jaap, Fungi sel. exsicc. n. 363, Abh. Bot. Ver. Prov. Brandenb. LII (1910) Extr. p. 5. — A typo differt imprimis ascomatibus minoribus, tenuioribus, longius stipitatis et lætius rubello-coloratis.

Hab. in caulibus Humuli Lupuli dejectis, prope Triglitz Germaniae.

12. *Helotium niveum* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII 5491 (1906) p. 44. — Ascomatibus solitariis, pedicello 1-2 mm. long., 1 mm. cr. pruinoso præditis, ceraceis, primum albo-niveis, siccis flavescentibus, late apertis et mox fere pileato-revolutis, acute marginatis, 1 mm. circ. diam.; ascis subclavatis, 50-70 × 4-5 basi in pedicellum elongatis, supra rotundatis, octosporis, oblique mono-

v. distichis, hyalinis, unilocularibus, fusoideis, 6-9 \times 2-3, biguttulatis; paraphysibus filiformibus 1,5 μ . cr.

Hab. in foliis pineis putrescentibus, in silvis prope Rathenow Germaniae.

13. *Helotium musicola* Spegazz., Myc. Arg. IV in An. Mus. Buenos Aires (1909) p. 446. — Pusillum, cinerescens, sessile, in macula albida situm, laxe gregarium, 0,5-0,8 mm. diam., extus olivaceum, planiusculum, margine integerrimo; ascis subclavatis, a paraphysatis, octosporis, breviter noduloso-pedicellatis, 60-65 \times 10-14, jodo fere immutatis; sporidiis ex elliptico subovatis, minutis, utrinque obtusulis, 10-12 \times 5-6, hyalinis, non v. grosse 2-guttatis.

Hab. ad folia et petiolos Musæ paradisiacæ in hortis pr. Orán, Argentina.

14. *Helotium citrinulum* Karst. — Syll. VIII, p. 288 (*Pezizella*) — 5498 var. *Seaveri* Rehm, Ascom. (1906) n. 1634, Ann. Myc. IV (1906) p. 67. — Ascomatibus dispersis sessilibus, primitus globoso-clavis, mox patellariformiter apertis, disco orbiculari, tenuiter marginato, citrino-flavo, 0,5-4 mm. diam., extus glabris, albidis, versus basim subangustatis, excipulo prosenchymatice contexto, ceraceis, senilibus subuplicatis crassiusque marginatis, siccis disco aurantio-flavo; ascis clavatis, apice rotundatis, 40-45 \times 5-7, octosporis; J+; sporidiis fusoideis, rectis v. subcurvatulis, utrinque acutatis, 1-cellularibus, hyalinis, 7-10 \times 1,5, distichis; paraphysibus filiformibus, hyalinis, 1 μ . cr.

Hab. ad calamos sicclos Caricis? in locis apestribus, Iowa City Iowa U. St. Amer. (F. J. SEAVER).

15. *Helotium fulvidulum* (Boud.) Sacc. et Trav. — Syll. XIX, p. 838, 5494 *Pachydisca fulvidula* Boud., Icon. Mycol. t. III, pl. 439 (1907), Hist. et Classif. Discomyc. Europe (1907) p. 94. — Minutum, 1,5-3 mm. latum, sessile aut brevissime crasseque stipitatum, cupulis convexis, adultis sublobatis, fulvis, extus ad basim nigricantibus; ascis elongato-claviformibus, octosporis, foramine marginato jodo vix cærulecente, 120-140 \times 14-15; paraphysibus septatis, ad apices non incrassatis, 3-4 μ . cr., intus granulis oleosis fulvis sæpe confluentibus repletis; sporidiis oblongo-fusoideis, albis, rectis aut parum curvulis, intus guttulis oleosis albis 2-4 aut multis repletis, 20-28 \times 5-6.

Hab. ad terram inter Gramina et Carices, locis uidis in silva Montmorency, Gallia.

16. *Helotium Bambusæ* v. Höhnel, Ergebni. Bot. Exp. Südbras. 1901, 5495

Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 33.
 — Ascomatibus sparsis, lenticularibus, disco parum prominenti, 1,5-3 mm. diam. et stipite 0,5 mm. longo, crassiusculo præditis, griseo-brunneolis, extus obscurioribus et radiatim striatis, plectenchymatico-fibrosis, brunneis; ascis longe pedicellatis, tunica tenui donatis, 120 \times 6-6,5, octosporis; paraphysibus filiformibus, numerosis, supra brunneolis et leniter clavatis, usque ad 3 μ . cr.; sporidiis supra distichis, hyalinis, guttulatis, elongato-cylindraceis, utrinque obtusulis, 8-10 \times 2,5-3; J +.

Hab. in culmo Bambusæ, Bertiago prope Santos, São Paulo in Brasilia.

17. **Helotium carneolum** Speg., Myc. Argent. IV in An. Mus. Buenos Aires (1909) p. 445. — Ascomatibus lenticularibus, subsessilibus, parvis, ceraceis, carneis, 0,5-1 mm. diam., inferne subturbinatis, supra convexulis, margine acuto integerrimis; ascis subclavulatis, apice obtuse rotundatis, crasse noduloseque pedicellatis, 50 \times 7-8, octosporis, interdum tetrasporis, parce filiformi-paraphysatis; sporidiis navicularibus, 2-guttulatis, in ascii parte super. congregatis, utrinque acutiusculis, levibus, 8-9 \times 2.

Hab. ad folia dejecta putrescentia Arundinis Donacis in silva Santa Catalina pr. Buenos Aires Argentina.

18. **Helotium crastophilum** Sacc., in Ann. Mycol. X (1912) p. 312. — 5497
 Subsparsum, ceraceum, totum albido-flavidum, minutum, stipitato-infundibuliforme, glabrum; cupula 300-400 μ . alta, 250 μ . lata, etiam in sicco aperta, margine integro, contextu anguste prosenchymatico; stipite paullo obscuriore, cylindrico, 250 \times 80-90; ascis cylindraceis, breve stipitatis, apice rotundatis, paraphysibus filiformibus, copiosis obvallatis, octosporis, 110-130 \times 12-14; sporidiis oblique monostichis, navicularibus, utrinque obtusule tenuatis, 20 \times 5-6, granuloso-guttulatis, hyalinis.

Hab. in culmis putrescentibus dejectis, Lyndonville New York Amer. bor. Oct. 1911 (FAIRMAN). — A speciebus graminicolis probe diversum.

19. **Helotium tetrascosporum** Rea, Trans. Brit. Myc. Soc. 1908, v. III 5498 (1909) p. 129. — Ascomatibus stipitatis, cupuliformibus 1,5-2 mm. alt., 0,5 mm. latis, disco ochraceo, extus pallidioribus, glabris, marginibus inflexis; substantia subconcolori, ceraceo-subgelatinosa; ascis clavatis, J -, constanter tetrasporis, 125-130 \times 8-9, paraphysibus filiformibus, ramosis, septatis, apice leniter subincrassatis, 145-155 \times 1-1,5; sporidiis oblongo-ellipsoideis, hyalinis, primo conti-

nuis, triguttulatis, monostichis, dein maturis distichis, biseptatis, 21-27 \times 3,5-4,5.

Hab. ad culmos sicclos Phalaridis arundinaceæ prope Perth Britannia (J. MENZIES).

20. *Helotium ? phæoliomum* (Lév.) Sacc. et Trott., *Peziza phæoloma* 5499 Lév. in Demid. p. 97, t. IV, f. 7. — Gregarium, 1 mm. altum, obconicum, nudum; disco concavo fuscescente, margine præminentem saturatius fusco; stipite brevissimo crasso albicante.

Hab. in culmis *Andropogonis?* (*racine à balais*) Skuloni in Tauria.

21. *Helotium pezizeideum* Cooke — Syll. X, pag. 9 — var. *quadri-nucleatum* Starb. Ascom. Schwed. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) pag. 4. — Ascomatibus gregariis vel sparsis, turbinatis, deinde applanatis, citrinis; ascis anguste clavatis, sursum rotundatis, longissime pedicellatis, 75-90 \times 5-5,5; sporidiis octonis, mono- vel distichis, clavulato-fusoideis, quadri-nucleatis, 7,5-9 \times 2.

Hab. in ligno mucido, Tatarenda Gran Chaco, Bolivia.

22. *Helotium aurantiacum* Gill. Champ. de France, Discom. (descriptio deest in textu) fig. 74. — Ascomatibus solitariis v. binis connexis, valde irregularibus, brevissime stipitatis; disco convexo e rubescenti aurantiaco, ambitu plano (non marginato) demum varie inciso-lobato; stipite brevissimo crasso obconico, in disci partem inferiorem albam sensim abeunte et itidem albo; ascis cylindraceis, apice rotundatis, deorsum sensim tenuato-stipitatis, octosporis; paraphysibus filiformibus 1-2-furcatis; sporidiis oblique monostichis ovoideis, apice altero rotundato, altero acutato, pluriguttulatis, hyalinis.

Hab. in fragmentis ligneis in Gallia. — Videtur species majuscula (ex icono circ. 1 cm. lata) et macrospora, tamen dubia.

23. *Helotium subrubescens* Rehm, Ann. Mycol. VII (1909) p. 524, 5502 Ascom. Exsicc. fasc. 45, n. 1852. — Ascomatibus gregariis, interdum pluribus arcte congregatis, in cortice incrassato ramuli terræ infossi putrescentis sessilibus, primitus globoso-clausis, dein cymo-thoideis, crasse marginatis, 1-4 mm. diam., siccis complicatis involutisque, in stipitem versus basim tenuiorem, cylindraceum, subcurvatum, 1-2 cm. longum, 0,5-1 mm. lat. abeuntibus, extus glabris, dilute rubescentibus, siccis dilute alutaceis, albido-pruinosis, ceraceis, prosenchymaticæ contextis; ascis cylindraceo-clavatis, apice rotundatis, 60 \times 5, octosporis, jodo cærulecentibus; sporidiis

bacillaribus v. subclavatis, rectis, 1-cellularibus, hyalinis, 7-8 \times 1,5, distichis; paraphysibus filiformibus, subacutatis, paullulum prominentibus, hyalinis, 2-2,5 μ . cr.

Hab. in ramulo putrescente, Madison Wisc. Amer. bor. (B. A. Dodge).

24. **Helotium obconicum** von Höhnel, Sitzb. k. Ak. d. Wiss. Wien 5503 CXVIII, Abt I (1909) p. 389, cum icon. — Ascomatibus sparsis, raro binatis, obconoideo-turbinatis, disco concavo, basi breviter angustatis, pallide flavo-ceraceis, disco obscuriore, 2-2,5 \times 1,5-2 mm, margine obtuso crassiusculo, sicco subrevoluto; excipulo 50 μ . circ. cr. ex hyphis hinc inde extus filiformiter prominentibus; hymenio 150 μ . cr.; hypothecio 1 mm. circ. cr. laxe subspongioso, plectenchymatico; ascis cylindraceo-clavatis, supra angustatis obtusis, basi in pedicellum brevem crassum tenuatis, 125-140 \times 11-12, octosporis; paraphysibus filiformibus 1,5 μ . cr. apice obtusulis, crassiusculis, ascum parum superantibus; sporidiis subdistichis, hyalinis, ellipsoideo-fusoideis, apice obtusulis v. subacutatis, plerumque grosse biguttulatis, tenuiter tunicatis, unilocularibus, 17-24 \times 6-7, J +.

Hab. in ligno duro putri dejecto, Tjibodas in insula Java. —

— *Hel. subturbinato* P. Henn. affine.

25. **Helotium Marchantiæ** (Berk.) Fr. — Syll. VIII, p. 246 — var. 5504 **Conocephali** Boyd. Trans. Br. Myc. Soc. III, 1908, 2, p. 113 (1909). — Ascomatibus magnitudine variabilibus, primum pallidis, dein obscure brunneis, plerumque in maculis pallidis insidentibus; sporidiis oblongis fusoideis, latiusculis, 18-21 \times 5; paraphysibus in massa brunneolis.

Hab. ad thallum Conocephali conici, Dalry Ayrshire, Britannia. — A typo differt sporidiis latioribus et maculis albicantibus matricis.

26. **Helotium amœnum** (Pat.) Sacc. et Trott., *Pachydisca amœna* Pat. 5505 touill., Bull. trim. Soc. Myc. de France, vol. XXI (1905) p. 120. — Ascomate carnosò, molli, 0,5-1,5 mm. diam., roseo-pallido vel violaceo, glabro, cylindraceo, apice truncato, primum plano dein leniter depresso, demum convexo et parum expanso; ascis cylindraceis sensim in basim attenuatis, apice truncatis et poro marginato dehiscentibus, jodi ope non cyanescensibus, 60-90 \times 8-10, 8-sporis; paraphysibus copiosis, rectis, cylindraceis, 2 μ . cr., hyalinis, simplicibus, guttulis refringentibus praeditis; sporidiis distichis, ovoides, hyalinis, levibus, 6-8 \times 3-4, granulatis.

Hab. parasitica ad thallum Ricciæ sp., Alger, Algeria Africæ bor. (TRABUT). — *Pezizellæ (Epiglæ) glaeocapsæ* affine.

27. *Helotium chordicola* Speg., Fungi Arg. IV, in An. Mus. Buenos Aires (1909) p. 445. — Ascomatibus sessilibus, subceraceis, subniniatis, parvulis, laxe gregariis, orbicularibus, 2-3 mm. lat., margine integerrimis, planiusculis; ascis linearibus 50-55 \times 5, octosporis, modice tenuato-pedicellatis, paraphysibus capitato-clavulatis obvallatis; sporidiis elongato-ellipsoideis, subrectitis, oblique monostichis, utrinque acutiuscule rotundatis, 6-8 \times 3-3,5, hyalinis, eguttulatis.

Hab. in chorda putrescente inter folia delapsa, La Plata, Argentina.

28. *Helotium griseum* von Höhnel, Sitzb. k. Akad. d. Wiss. Wien CXVIII, Abt. I (1909) p. 388. — Ascomatibus arcte gregariis, saepè compluribus adnatis, 400-500 μ . diam., disco pallide v. obscure griseo, depresso, extus griseolis, basi obscurioribus, stipite 200-250 \times 100-150; contextu subprosenchymatico, hypothecio crasso; excipulo extus breviter ob hyphas prominentes inflatas molle verruculos; ascis clavatis longe pedicellatis, octosporis, tenuiter tunicatis, 65-68 \times 5-6; sporidiis mono- v. distichis, hyalinis, unilocularibus, elongato-ellipsoideis, acutis v. obtusulis, 5-6 \times 1,5-2; J+.

Hab. in hymenio Polypori concrescentis vetusti, Tjibodas in ins. Java.

29. *Helotium albo-fuscidulum* Rehm, Österr. Botan. Zeitschr. LVI (1906) p. 346. — (Nomen nudum).

Hab. in caulinis emortuis Aconiti sp. Schrofenpass Tiroliæ.

PHIALEA (Fr.) Gill. — Syll. VIII p. 251, X p. 9, XI p. 403, XIV p. 765, XVI p. 727, XVIII p. 54.

1. *Phialea turbinata* Syd., Ann. Myc. V (1907) p. 397; Mycoth. germ. 5509 599. — Ascomatibus plerumque gregariis, rarius sparsis, primo clausis, dein apertis, eximie turbinatis, disco pallido tenuiter marginato, extus parte cupulae superiore pallida, parte cupulae inferiore atro-grisea, levibus, siccis vix complicatis, 0,2-0,5 mm. latius, ceraceis; stipite 0,3-0,55 mm. alto, 90-150 μ . crasso, basi leniter crassiore ibique 120-180 μ . crasso, superne atro-griseo, inferne dilutiore, levi, vix striato; ascis cylindraceis, apice rotundatis, 35-40 \times 4-5 $\frac{1}{2}$, octosporis; sporidiis bacillaribus, continuis, hyalinis, plerumque rectis, 7-8 $\frac{1}{2}$ \times 1 $\frac{1}{2}$ -2 $\frac{1}{2}$, paraphysibus filiformibus, ascis parum superantibus.

Hab. in caulis putrescentibus Ranunculi spec. Eube pr. Gersfeld, prov. Hessen-Nassau Germaniae.

2. **Phialea cyathoidea** (Bull.) Gill. — Syll. VIII, pag. 251 — var. **5510** minor Rehm, in Bubák Bull. Herb. Boiss. 2 sér. VI (1906) p. 398. — Ascomatibus circ. 0,5 mm. alt., 0,3-0,45 mm. latis, humidis brunneolis, siccis fere brunneis; stipite 0,15-0,2 mm. longo, circ. 0,085 mm. cr.; ascis 40-45 \approx 4-4,5; sporidiis 7-9 \approx 1,5.

Hab. in caulis senioribus Ranunculi Villarsii, prope Andrijevica sub Hasanac Planina 1000-1400 m. alt. Montenegro.

3. **Phialea stamnarioides** Rehm, Ann. Mycol. V (1907) pag. 534. — **5511** Ascomatibus gregariis, sessilibus, primitus subglobosis, dein disco explanato orbiculari, plano vel convexulo, tenuiter marginato, 0,2-1 mm. diam., brevissime cylindraceo-stipitatis, 0,5 mm. alt., dilutissime lutescentibus, glabris, primitus subgelatinosis, excipulo prosenchymerico; ascis clavatis, apice rotundatis, subcurvatis, 150-160 \times 10-12, octosporis, jodo immutatis; sporidiis subfusiformibus, obtusis, subcurvatis, 1-cellularibus, utroque apice guttulatis, hyalinis, 15-18 \approx 5, distichis; paraphysibus filiformibus, hyalinis, circ. 2,5 μ . lat.

Hab. ad caules putrescentes Aconiti variegati, Scheideck infra montem Virginis Helvetiae (REHM). — Prima ætate subgelatinosa, hinc ad *Stamnarium* nutans.

4. **Phialea Lychnidis** Ces. ap. Klotzsch, Herb. viv. mycol. n. 1616 **5512** (1852).

Hab. ad caules Lychnidis dioicæ, Vercelli Ital. sup. — Ex Rabenh. forma *Phialea cyathoidea*.

5. **Phialea bicolor** Starb. — Syll. XIV, pag. 765 — var. **5513** alpestris Rehm, Ascom. Exsicc. fasc. 46, n. 830 b, Ann. Mycol. (1910) p. 303. — Stipite crasso, multo pallidiore, demum longitudinaliter plicato; J -.

Hab. in caulis Arnicæ montanæ, Söllereck Algoviae Germania.

6. **Phialea phyllophilæ** (Desm.) Gill. — Syll. VIII, pag. 274 — var. **5514** Jaapii Rehm, in Jaap Abh. Bot. Ver. Prov. Brandenb. IL (1907) p. 10. — A typo differt præcipue sporidiis eguttulatis.

Hab. ad nervos foliorum Populi canadensis pr. Triglitz in Brandenburgia.

7. **Phialea minutula** Bres. in Strasser, III Nachtr. Pilz. Sonntagb. **5515** (Verhandl. zool. bot. Gesell. Wien 1905, p. 612). — Ascomatibus gregariis, stipitatis, minutissimis, vix 0,5 mm., cum stipite, altis,

albis, margine pruinosis; hymenio concolore; stipite stramineo; ascis clavatis, 36-40 \times 4,5-5, jodo poro cærulescentibus; paraphysibus filiformibus; sporidiis subfuscideis, 5-7 \times 2,5.

Hab. ad ligna mucida arborum frondosarum, Sonntagberg Austriae inf.

8. *Phialea obscura* P. Henn., Engl. Jahrb. XXXVIII (1905) p. 116. 5516

Ascomatibus sparsis, ceraceo-membranaceis v. subcoriaceis, stipitatis, cupulatis, extus cinereo-fuscis, pruinosis, venosulo-rugulosis; disco concavo, levi, atro-fuscidulo, 2-2,5 mm. diam.; stipite tereti, farcto, fusco-cinereo, pruinoso, 1-2 mm. long.; ascis cylindraceo-clavatis, obtusis, octosporis, 40-45 \times 4, paraphysibus filiformibus, c. 2 μ . cr., hyalinis, intus fuscidulo-granulatis; sporidiis oblique monostichis v. subdistichis, oblongo-fusoideis, rectis vel curvulis, utrinque acutiusculis, intus fuscidulo-granulatis, hyalinis, 7-8 \times 2,5.

Hab. in cortice arborum, Amani Ost-Usambara Africæ centr. (EICHELEBAUM).

9. *Phialea Queletii* Sacc. et Trav. — Syll. XX, pag. 331 — *Peziza* 5517

gracilis Quél. Champ. Jura et Vosg. II, p. 406, t. V, f. 6 (1873), non Cooke et Peck, *Phialea gracilis* Gill. Champ. Fr. Discom. p. 99, fig. 172. — Ascomatibus stipitatis; stipite filiformi, 2-3 cm., long., pallide griseo; cupula ceracea, tenui, pruinosa, urceolata, dein concava, demum applanata, 1 cm. lata, cinereo-pallida, albo-marginata; disco cremeo-griseo; ascis cylindraceis deorsum leviter tenuatis, octosporis; sporidiis oblique monostichis, ellipsoideis vel pruiniformibus, 10 μ . longis.

Hab. in ramulis dejectis foliis obtectis, Jura Galliae.

10. *Phialea euspora* Rick, Broteria V (1906) p. 35. — Ascomatibus 5518

convexo-depressis, crassiusculis, margine recto, plerumque integro, regulariter orbicularibus, flavis, usque ad 4 mm. latis, hymenio cereo, subtiliter velutino, separabili ab hypothecio, extus albidis, rugosis, sericeis, in stipitem 1-2 mm. longum, crassum et pubescens, basi nigra, abeuntibus; ascis 170-180 \times 12; sporidiis ellipsoideis v. rotundatis, 12 \times 6, grosse uniguttulatis, unilocularibus, uni-serialibus; paraphysibus hyalinis, filiformibus, paucis.

Hab. ad folia putrida, marginem et petiolum sequens, Rio Grande do Sul Brasiliæ. — Sporis et hymenio imitatur *Euzepizas*, modo vegetandi *Phialeam Sydowianam*.

11. *Phialea scutula* (Pers.) Gill. — Syll. VIII, p. 266 — var. epi-

calamia (Karst.) Sacc. Fungi ital. fig. 1339, *Helotium scutula* var. *epicalamium* Karst. Myc. Fenn. I, p. 111 (1871), Michelia I, p. 427.

— Typo subsimilis sed multo minor et gracilior; sporidiis aciculari-elongatis, rectis curvulisve, 19-24 \times 3-4, bi-quadriguttatis.

Hab. ad calamos Týpha latifoliae in Fennia et graminum majorum, Conegliano et Sermide Ital. bor.

12. *Phialea nivalis* Rehm, Ann. Myc. III (1905) p. 411 et Ascom. 5520 exsicc. fasc. 35, n. 1606. — Ascomatibus dispersis, plerumque solitariis, sessilibus, globuloso-cyathoideis, in stipitem brevissimum elongatis, glabris, albidulis, versus marginem fuscidulis, demum dilute fuscis, 200-210 μ . diam. et alt., prosenchymaticis, siccis globo-o-involutis, extus subfarinaceis; ascis cylindraceis, apice subacutatis, sessilibus, 50-55 \times 6-8, octosporis, poro jodo dilute tincto; sporidiis fusiformibus, rectis vel subcurvatis, 1-cellularibus, hyalinis, 12-15 \times 3, distichis; paraphysibus filiformibus, hyalinis, 2,5 μ . lat., ascos superantibus.

Hab. ad folia graminea putrida inter Rhododendra ferr. in suprema parte vallis Zillerthal Tiroliae (Dr. REHM). — Minutie ascomatum et sporidiorum a *Ph. culmicola* mox distinguenda.

13. *Phialea incertella* Rehm in Sydow, Myc. germ. n. 505 et Ann. 5521 Myc. IV (1906) pag. 485. — Ascomatibus plerumque gregariis, cyathoideis, primitus clausis, dein urceolatis, disco subhyalino, tenuissime, haud pruinose marginato, in stipitem crassum brevissimum elongatis, 0,2-0,25 mm. latis et altis, excipulo glabro, fusco, prosenchymatico, siccis nigro-fuscidulis; ascis clavatis, apice rotundatis, 30-40 \times 5-6, octosporis, poro jodi ope tincto; sporidiis fusiformibus, rectis, utrinque acutatis, 1-cellularibus, hyalinis, 5-6 \times 1 $\frac{1}{2}$ -2, distichis; paraphysibus partim apice lanciformiter acutatis, hymenium longe superantibus, in medio 5-7 μ . latis, partim filiformibus, hyalinis, 2 μ . latis.

Hab. ad folia emortua Kœleriæ cristatae, prope Erfurt (H. DIEDICKE). — Proxima *Ph. eburnea* Rob. et Desm. colore dilutiore, sporidiis (sec. Karsten in Hedwigia 1893, p. 69) modo 4-6 \times 0,5 diversa.

14. *Phialea epibrya* v. Höhnel, Fragm. z. Mykol., Sitzb. k. Ak. d. 5522 Wiss. Wien, Bd. CXVI, Abt. I (1907) pag. 136. — Ascomatibus sparsis, solitariis, subsessilibus, obconoideis, depressis v. concaviusculis, 420-450 μ . latis, breviter pallideque marginatis, e rubido vitellinis, glabris, ceraceis; contextu minute fibroso-parenchymatico, e rosaceo flavido; ascis octosporis, sessilibus, clavatis, 50-60 \times 8-9, paraphysibus filiformibus 1,5-2 μ . cr. obtusis obsitis; sporidiis hyalinis, distichis, elongatis v. subclavatis, rectis v. vix curvulis,

unilocularibus, minute granuloso-farctis, eguttulatis, 12-18 \times 3-4, utrinque obtusis; excipulo tenui.

Hab. in foliis *Hypni* sp. prope Saar Moravia, Austria.

15. *Phialea gibba* (A. S.) Sacc. VIII, p. 271 est *Cyphella infundibuliformis* (Schäff.) Fr. — Syll. VI, p. 668 — seu *Omphalia gibba* (A. S.) Pat. Ic. n. 560, nec discomyceta.

PEZIZELLA Fuck. — Syll. VIII p. 275, X p. 10, XI p. 405, XIV p. 768, XVI p. 729, XVIII p. 57.

1. *Pezizella lanceolato-paraphysata* Rehm, Ann. Mycol. VI (1908) 5523

p. 316. — Ascomatibus gregariis, sessilibus, primitus globoso-clausis, dein disco orbiculariter expanso, plano, tenuissime marginato, flavidulo, 0,3-0,8 mm. diam., siccis irregulariter contractis, versus basim angustatis, albidulo-marginatis; excipulo pseudoparenchymatico, versus marginem non dilacerato, glabro; ascis clavatis, apice rotundatis, 30 \times 5-7, octosporis, jodo immutatis; sporidiis clavatis, rectis, hyalinis, 1-cellularibus, 6-8 \times 2, distichis; paraphysibus lanceolato-acutatis, longe prominentibus, hyalinis.

Hab. ad caules siccis Spirææ Filipendulæ, Lyndonville New York Amer. bor. (Dr. FAIRMAN). — A *Pez. deparcula* et *Hełtia scrupulosa* probe distincta.

2. *Pezizella epidemica* Rehm, Ann. Mycol. III (1905) p. 225, Ascom. 5524

exs. n. 1581. — Ascomatibus in hypophyllo demum maculatim flavescente gregariis, sessilibus, primitus globoso-clausis, dein patellaribus, disco plano distinete marginato, versus basim fuscidulum angustatis, glabris, hyalino-flavidulis, 200-300 μ . diam., siccis albidulis vel dilute brunneolis, excipulo pseudoprosenchymatice tenuiter contexto, versus marginem discretis cellularum seriebus, 3 μ . cr., ad apicem obtusis instructo; ascis clavatis, apice rotundatis, jodo immutatis, 50-60 \times 9-10, 8-sporis; sporidiis ellipsoideis, 1-cellularibus, guttas 2 oleosas inclientibus, hyalinis, 8-10 \times 4-5, distichis; paraphysibus filiformibus, septatis, hyalinis, 1,5 μ . versus apicem 2-3 μ . cr.

Hab. ad folia viva Epilobii angustifolii in cacumine montis Fichtelberg Erzgebirg W. KRIEGER). — Affinis *Pezizellæ minutissimæ* (Karst.) Rehm = *Mollisia minutissima* Karst. — Syll. VIII, p. 327.

3. *Pezizella Elasticæ* Koord., Botan. Untersuch., (1907) pag. 161. — 5525
Ascomatibus gregariis, ceraceo-membranaceis, tenuibus, discoideis,

subsessilibus, glabris, levibus, aurantiaceis, in sicco fuscescentibus, 0,6-0,9 mm. diam.; ascis tereti-clavatis, apice haud incrassatis, 40-55 \times 3-4, filiformi-paraphysatis, octosporis; sporidiis fusiformibus 8-8,5 \times 1,5-2, continuis, hyalinis, utrinque acuminatissimis.

Hab. in foliis emortuis Fici elasticæ prope Loano prov. Kedu Java (KOORDERS).

4. **Pezizella platensis** Spegazz., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) p. 446. — Parva, tabacina, sessilis, subrigidula, sparsa, uda applanato-expansa, 0,5-1,5 mm. diam., sicca contracto-subglobosa, disco atro-plumbeo, margine acuto, integro; ascis subclavatis, aparaphysatis, apice rotundatis deorsum tenuatis modiceque pedicellatis, 60 \times 4-5, octosporis, jodo immutatis; sporidiis parvis, fufoideo-subcymbiformibus, utrinque acutiusculis, mono- v. distichis, 8-10 \times 2-2,5, hyalinis, eguttulatis.

Hab. ad ramos corticatos Casuarinæ strictæ putrescentes in Parque La Plata, Argentina.

5. **Pezizella hyalino-sulphurea** Rehm in Bachman, Proceed. Ohio State Ac. of Sc. v. V, P. II (1909) n. 14, pag. 56. — Ascomatibus in superiore folii pagina dispersis, sessilibus, primitus globoso-clausis, dein patellaribus, disco plano tenuissime marginato, extus glabris, versus basim angustatis, hyalino-sulphureis, 200-250 μ . diam., excipulo pseudoparenchymatico contexto, ad marginem cellulis 8 \times 1,5 elongatis, obtuse fimbriato, siccis citrinulis, concavis; ascis clavatis, apice rotundatis, 25-30 \times 5-6, jodo cærulescentibus, 8-sporis; sporidiis oblongis, rectis, utrinque rotundatis, 1-cellularibus, hyalinis, 5-7 \times 2-2,5, distichis; paraphysibus filiformibus, hyalinis 2 μ . crassis.

Hab. ad folium putridum Fagi, Oxford O., Amer. bor.

6. **Pezizella Jaapii** Rehm, in Jaap Abh. Bot. Ver. Prov. Brandenb. IL (1907) p. 9. — Ascomatibus gregariis, sessilibus, primum globoso-clausis dein rotundato-apertis expansis, tenui marginatis, flavis; excipulo basi subnodoso, extus levi, parenchymatico, pallido, margine hyphis obtusis flavidis 4 μ . cr., siccis albo-flavis praedito 0,8-0,7 mm. diam.; ascis elongato-clavatis, supra rotundatis 30-35 \times 4-5, tetrasporis, J+; sporidiis fusoideis v. acicularibus, supra subobtusis, rectis v. leniter curvulis, unilocularibus, hyalinis, 15-17 \times 1,5-2, distichis; paraphysibus filiformibus, septatis, obtusis, hyalinis, 1,5 μ . cr.

Hab. in foliis putrescentibus Betulæ verrucosæ nec non in foliis Populi, Quercus, Fagi prope Triglitz in Branden-

burgia. — *Pez. leucellæ* (Karst.) Sacc. affinis, sed differt colore et ascis tetrasporis.

7. **Pezizella Fairmani** Rehm, Ann. Mycol. V (1907) p. 519. — Asco- 5529 matibus dispersis, sessilibus, primitus globosis, dein explanatis, disco orbiculari tenuissime marginato, extus glabris, 250-270 μ : d., hyalino-subflavidulis, siccis plerumque convolutis, flavidulis, excipulo tenuissimo prosenchymatico; hyphis ad marginem subelongatis, obtusis, 4 μ . cr.; ascis clavatis, apice rotundatis, 30-35 \times 6-8, octosporis, jodo immutatis; sporidiis ovoideis, 1-cellularibus, hyalinis, 6-7 \times 3, distichis; paraphysibus filiformibus, versus apicem 3 μ . cr., hyalinis.

Hab. in ligno *Tsugæ canadensis*, Lyndonville New York Amer. bor. (FAIRMAN). — *Pulchella exigua* species.

8. **Pezizella virens** (A. et S.) Rehm Disc. p. 662, *Peziza virens* Alb. 5530 et Schw. Fung. Lusat. p. 338, t. X, f. 10, Cooke Grevillea III (1875) t. 51, fig. 257. — Ascomatibus minutis, sparsis v. gregariis, crustula effusa obsolete virescente insertis, disco regulari, albido v. dilute rubescente, levi, tenuiter marginato præditis, subdiaphanis, siccis albis.

Hab. in truncis cavis putrescentibus Pinorum in silvis umbrosis Lusatiae. — Observante cl. Rehm, forte congruit cum *Micarea prasina* Fr. lichenibus adscripta, que gaudet ascis clavatis, octosporis, sporidiis oblongo-ovoideis, continua dein bicellularibus, hyalinis 9-11 \times 3.

9. **Peziza subcinerea** Rehm, Ann. Mycol. V (1907) p. 519. — Asco- 5531 matibus dispersis, sessilibus, primitus globoso-clausis, dein disco orbiculari, tenuiter marginato, plano, hyalino, 0,5-2 mm. diam., extus glabris, cinereo-hyalinis, siccis subinvolutis, excipulo parenchymatico hyalino, versus marginem ex hyphis elongatis contexto, hyphis marginalibus haud distantibus, obtusis; ascis clavatis, ad apicem rotundatis, 50 \times 5-7 octosporis, jodo cærulescentibus; sporidiis oblongis, utrinque obtusis, 1-cellularibus, rectis vel subcurvatalis, hyalinis, 6-7 \times 2, distichis; paraphysibus hyalinis, 3 μ . cr.

Hab. ad lignum mucidum, Madison Amer. bor. (HARPER). — *Pezizella carneo-flavæ* affinis sed colore sporidiisque plane distincta.

10. **Pezizella obscurata** Rehm, Contr. Myc. Hung. (Növ. Közl. 1905, 5532 p. 5). — Ascomatibus dispersis, sessilibus, primitus globoso-clausis, dein urceolatis, tenuissime marginatis, olivaceis, extus glabris, excipulo ad basim parenchymatico, supra prosenchymatico, fusco-

flavidulo, 0,2-0,3 mm., ceraceis, siccis corrugatis, nigris; ascis clavatis, apice rotundatis, 40-45 \times 5-6, octosporis, jodo immutatis; sporidiis oblongis, obtusis, utroque apice guttulatis, 1-cellularibus, hyalinis, 4-5 \times 2, distichis; paraphysibus filiformibus, hyalinis, 2-2,5 μ .

Hab. ad frustula lignea, Berencsfalu, prope Selmeczbánya, Hungaria (KMET). — Proxima *Pezizellæ granulosellæ* (Karst.) Rehm quoad formam, sed colore olivaceo, ascis jodo non tinctis et sporarum minutie plane diversa species.

11. **Pezizella rectispora** (Boud.) Sacc. et Trav. — Syll. XX, p. 321 5533

— *Hyalinia rectispora* Boud., Icon. Mycol. t. III, tab. 467, Hist. et Classif. Discomyc. Europe (1907) p. 103. — Minutissima 0,3-0,6 mm. lata, convexula, pallide cinereo-lutescens; ascis minutis, cylindricis, saepe ad basim appendiculatis, octosporis, inoperculatis et ad apicem truncatis, 33-38 \times 2,5 μ , paraphysibus hyalinis, simplicibus aut divisis, tenuibus, ad apicem non capitatis, 1,5 μ . cr.; sporidiis bacillaribus, rectis, ramis subflexuosis, 7-9 μ . longis, 1,5 μ . cr., intus non granulosis.

Hab. ad folia putrida Scirpi silvatici in paludosis, Ecouen Galliae.

12. **Pezizella fuscescens** Rehm, Verh. zool.-bot. Gesell. Wien LVII 5534

(1907) p. 329. — Ascomatibus in maculis brunneis rotundatis 1-2 cm. lat. hypophyllis sparse insidentibus, primum globoso-clausis, dein discum planum, rotundatum, raro parum prominentem, tenui-mARGINatum ostendentibus, extus glabris, brunneis, c. 300 μ . d. excipulo grosse parenchymatico, ad marginem ciliolatis, siccis, brunneis, quandoque albo-ciliatis, tenui-ceraceis; ascis clavatis, apice obtuse acutatis, 50-70 \times 10-12, octosporis, J+; sporidiis clavatis apice obtusis, crassis, rectis, unilocularibus (an demum uniseptatis?), utrinque uniguttulatis, hyalinis, 15-18 \times 3-3,5, distichis; paraphysibus filiformibus c. 2 μ . cr., hyalinis.

Hab. ad folia emortua Caricis pendulæ in silvis Sonntag-berg Austriae inf.

13. **Pezizella sepulta** Rehm, Ascom. exsicc. fasc. 37, n. 1653, Ann. 5535

Mycol. IV (1906) p. 405. — Ascomatibus dispersis, primitus clausis, dein patellaribus, disco orbiculari tenuissime marginato, plano, albo, excipulo glabro, hyalino, pseudoparenchymatico contexto, 150-200 μ . diam., siccis subglobosis; ascis clavatis, apice obtuse acutatis, late sessilibus, 20-25 \times 5-6, J+, octosporis; sporidiis fusoideis, plerumque curvatulis, utrinque acutatis, unilocularibus, guttula o-

leosa utrinque præditis, hyalinis, 8-9 \times 2, distichis; paraphysibus filiformibus, 1 μ . cr., haud clavatis, hyalinis.

Hab. fasciculo putrescente Junci Hostii, Alpeiner-Alpe pr. Stubai Tyrolia (REHM). — *Pezizella turgidellæ* (Karst.) Rehm affinis sed ascomatibus incoloribus, ascis minoribus.

14. *Pezizella subglacialis* Rehm, Hedwigia XXVIII (1889) p. 348. 5536

— Ascomatibus sessilibus, primitus globosis, clausis, dein urceolatis, demum patellaribus, 0,15-0,5 mm. lat., dilute flavidulis, siccis saepe subfuscis et plicatis, disco hyalino; basi parenchymatice e cellulis minutis composita, versus marginem pseudoprosenchymaticis, hyalinis, subtus denique hyphis simplicibus, brevibus, 5 μ . lat., fuscis obsessis; ascis clavatis, apice obtuse acutatis, 45-50 \times 6-7, octosporis; sporidiis fusiformi-oblongatis, obtusis, rectis, unicellularibus, utroque apice plerumque guttulis oleosis instructis, hyalinis, 9-10 \times 1,5-2, distichis; paraphysibus filiformibus, haud clavatis, 2 μ . cr., hyalinis; poro ope J. cærulecente.

Hab. ad culmos putrescentes Nardi strictæ «Hochjoch» Oetz Tirolia.

15. *Pezizella tumidula* (Rob. et Desm.) Sacc. — Syll. VIII, p. 276 5537

— var. *Rhododendri* Rehm, Österr. bot. Ztschr. LVI (1906) p. 345. (Nomen nudum).

Hab. in foliis putrescentibus Rhododendri hirsuti, Schriftenpass Tirolia.

PSEUDOHELOTIUM Fuck. — Syll. VIII p. 291, XI p. 406, XIV p. 772, XVI p. 729, XVIII p. 63.

1. *Pseudohelotium minutellum* (Boud.) Sacc. et Trav. — Syll. XX, 5538 p. 536, *Hyaloscypha minutella* Boud., Icon. Mycol. t. III, tab. 522 (1907), Hist. et Classif. Discomyc. Europe (1907) p. 127. — Minutissima, 0,2-0,4 mm. lata, alba aut nivea, subhyalina, sessilis, margine subfimbriato; ascis octosporis, claviformibus, 65-70 \times 10, inoperculatis; paraphysibus filiformibus, ad apicem vix incrassatis, simplicibus aut ad basim divisis, 3 μ . cr.; sporidiis hyalinis, cylindrico-fusoideis, leniter curvatis, guttulis oleosis sat crassis extremitatibus positis, farctis, 14-16 \times 3-4.

Hab. in ligno putri Cerasi, Montmorency, Gallia.

2. *Pseudohelotium Ulmariae* (Boud.) Sacc. et Trott., *Urceolella Ulmariae* Boud., Icon. Myc. t. III, tab. 535 (1907), Hist. et Classif. Discomyc. Europe (1907) p. 129. — Minutissima, lutea, 0,2-0,3 mm. lata, sessilis, extus puberula, pilis acutis, flexuosis, non aut ad ba-

sim tantum septatis, intus granulosis, 15-40 \times 2-3; ascis minutis, sat amplis, octosporis, foramine immarginato, 30-40 \times 7-8; paraphysibus cylindricis, intus guttulis oleosis luteis repletis; sporidiis fusoideo-elongatis, acutis, intus omnino granulosis medio minute vacuolatis, 15-18 \times 3.

Hab. in petiolis putrescentibus Spirææ Ulmariae in silvis Montmorency Gallia. — *Pseudohelotio deparculo* affine sed differt colore citrino, ascis octosporis, sporidiis majoribus, intus granulosis.

3. *Pseudohelotium microspermum* Speg., Myc. Arg. IV, in An. Mus. 5540 Buenos Aires (1909) p. 446. — Minutum, laxe gregarium, vix pedicellatum, tenuissime puberulum, extus cinerescens intus testaceum, orbiculare, 0,5-1 mm. diam., pilis cylindraceis subcontinuis 20-40 \times 3; ascis subclavulatis, apice rotundatis, brevissime crasse que pedicellatis, 30 \times 4, octosporis, parce filiformi-paraphysatis; sporidiis recte distichis, e fusoideo-naviculairibus, utrinque obtusulis, 4-6 \times 1,5, biguttatis v. diblastis, hyalinis.

Hab. ad ramos emortuos decorticatos Solani verbascifolii in silva Santa Catalina pr. Buenos Aires Argentina.

4. *Pseudohelotium glaucum* Speg., Fungi Chilenses (1910) pag. 122, 5541 cum icon. — Ascomatibus sparsis v. laxissime turbinato-patellari bus, brevissime pedicellatis, 1-2 mm. diam., tenuibus glaucis, extus pruinulosis, pilis minimis hyalinis subunicellularibus levibus sed subnodulosis, 25-50 \times 2-3; ascis linearibus subclavulatis obtusiusculis, paraphysatis, 50 \times 5-6, octosporis; paraphysibus 55-60 \times 1-1,5; sporidiis linearis-subfusoideis parvulis hyalinis, 8-10 \times 1,25-1,50.

Hab. ad pedunculos siccios putrescentes Lobeliæ Tupæ pr. Ciudad de Valdivia Chile Amer. austr. — E grege *Eu-Pseudohelotii*.

5. *Pseudohelotium ammoides* Sacc., Ann. Mycol. VI (1908) p. 564. — 5542 Dense v. laxe gregarium, superficiale, minutum, granuliforme, albidomelleum, ceraceum; ascomatibus urceolatis demum late aper tis, 350-370 μ . diam., albo-pruinosis, contextu minute celluloso, cellulis sphæroideis, ad marginem oblongis; ascis clavatis, apice summo truncatulis, deorsum sensim crasse tenuatis, 60-80 \times 8-9, octosporis; paraphysibus bacillaribus, subæqualibus; sporidiis in parte super. asci distichis obovatis, obtusis, 8,5-9 \times 2,5-3, hyalinis, eguttulatis.

Hab. in corticibus dejectis Carpinii in silvis Lyndonville Amer. bor. (FAIRMAN). — Affine *Pseudohelot. puberulo*, sed sporidia utrinque obtusa nec attenuata etc.

MOLLISIA (Fr.) Karst. — Syll. VIII p. 321, X p. 12, XI p. 407, XIV p. 774, XVI p. 720, XVIII p. 65.

1. **Mollisia atro-flava** Rehm, Ann. Mycol. V (1907) pag. 546, Sacc., 5543
Myc. ven 731 sub *Niptera cinereæ* forma. — Ascomatibus in ligno subnigrato gregariis, sessilibus, primitus globoso-clausis, dein patellaribus, disco orbiculari plano, sœpe tenuiter albidulo-marginato, cinereo-flavidulo, excipulo parenchymatico fusco, cellulis versus marginem elongatis, atro-fuscis præditis 0,3-2,5 mm. latis, cerasceis, siccis complicatis, involutis, scabriusculis; ascis clavatis, apice rotundatis, 45-50 \times 4-5, octosporis, jodo immutatis; sporidiis oblongis, obtusis, rectis vel subcurvatis, 1-cellularibus, hyalinis, 6-8 \times 2, distichis; paraphysibus filiformibus, 2 μ . crassis, haud clavatis, hyalinis.
Hab. in ligno Rhois radicantis putri in Italia boreali (G. BIZZOZERO).
2. **Mollisia lignicola** Phill. — Syll. VIII, p. 366 (*Pyrenopeziza*) — 5544
var. *viticola* P. Henn., Verh. Bot. Ver. Prov. Brandenb. L (1908) pag. 133. — A typo differt margine ascomatum albido et hyphis hyalinis, septatis prædicto, sporidiis plerumque clavatis, disco atro-cinereo; ascis octosporis, 45-52 \times 5,5-7,5; sporidiis 7-10 \times 2,5-3.
Hab. in ramis Vitis viniferæ, Tamsel Germania (VOGEL). — *M. Myricarie* (Rehm) etiam affinis sed differt disco griseo-albo. Nonnullis characteribus etiam ad gen. *Tapesiam* vergit.
3. **Mollisia pallens** (Boud.) Sacc. et Trott., *Mollisiella pallens* Boud., 5545
Icon. Mycol. tom. III, tab. 557 (1907), Hist. et Classif. Discomyc. Europe (1907) p. 142. — Minuta aut minutissima, 0,5-1 mm. lata, albido-cinerea; ascomatibus marginatis extus ad basim furfuraceo-nigrescentibus; ascis clavatis, octosporis, foramine vix marginato, 38-40 \times 7-8; paraphysibus tenuibus, granulosis 2 μ . cr.; sporidiis fusoideis, rectis v. curvulis, intus ad extremitates minute granulosis, 8-9 \times 1,5-2.
Hab. ad radices putres Pruni spinosæ, Montmorency Galliae.
4. **Mollisia rufa** Syd., Ann. Mycol. VIII (1910) p. 40. — Ascomata 5546
hypophyllis, in maculis effusis obsoletis pallidis plus minus copiose insidentibus, sparsis vel aggregatis, sessilibus, glabris, cereis, 0,3-0,4 mm. diam, disco rotundo griseolo tenuissime brunneo-marginato; in sicco corrugatis, atro-griseis; ascis clavatis vel cylindraceo-clavatis, apice rotundatis, octosporis, 45-60 \times 9, subsessilibus; sporidiis monostichis vel irregulariter distichis, late ellipsoides, utrinque rotundatis, continuis, eguttulatis, 5-9 \times 4-5, hya-

linis vel hyalino-viridulis; paraphysibus hyalinis, filiformibus, c. 1 μ . crassis.

Hab. in foliis vivis Lagerstroemiae speciosæ, Lamao, Bataan, prov. Luzon, ins. Philipp. (E. D. MERRILL). — Species minuta, ægre observanda, affinis ut videtur, *Mollisia arescenti* et *M. Mikaniæ*.

5. *Mollisia allantoidea* Syd., Ann. Mycol. VI (1908) p. 483. — Asco- 5547 matibus gregariis, rarius solitariis, late sessilibus, hinc inde confluentibus, disco plano tenuiter marginato, flavo-brunneis vel demum brunneis, levibus, 0,3-0,8 mm. diam., ceraceis; ascis clavato-cylindraceis, apice rotundatis, 18-25 \times 3, octosporis, breviter stipatis; sporidiis distichis, allantoideis, plerumque leniter curvulis, hyalinis, continuis, 3 $\frac{1}{2}$ -5 \times 1; paraphysibus paucis, filiformibus, hyalinis.

Hab. in caulibus Tanaceti vulgaris, Tamsel pr. Cüstrin, Marchia Brandenb. (P. VOGEL). — Species minutie ascorum et sporidiorum probe distinguenda.

6. *Mollisia fagicola* Noelli, Malpighia v. XXIII (1909) pag. 182. — 5548 Ascomatibus gregariis, superficialibus, minutis, sessilibus, 1-1,5 mm. latis, planis, demum convexis, extus glabris, fuscis; ascis elongatis, claviformibus, 8-sporis, 165-180 \times 14-19; sporidiis stipatis in parte superiore asci, elongatis, continuis, hyalinis, apice obtusis, infra acutis, 21-39 \times 2-3; paraphysibus filiformibus, gracilibus, curvulis.

Hab. in foliis Fagi silvaticæ prope Fomarco Val d'Ossola in Pedemontio It. bor.

7. *Mollisia obscurella* (Boud.) Sacc. et Trott., *Mollisiella obseurella* 5549 Boud., Icon. Mycol. t. III, tab. 556 (1907), Hist. et Classif. Discomyc. Europe (1907) p. 142. — Minuta aut minutissima 0,50-1,20 mm. lata, sessilis, applanata, marginata, dein varie undulata, cinereo-lutescens, hymenio fuliginoso, extus glabra; ascis clavatis, minutis, octosporis, ad basim attenuatis, 40-45 \times 7-8; paraphysibus rarioribus, tenuibus, intus subgranulosis, 1,5-2 μ cr.; sporidiis minoribus, ovato-oblongis, intus non granulosis, 5-6 \times 2-3.

Hab. ad corticem putrem Quercus, Montmorency, Gallia.

8. *Mollisia spectabilis* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII, 5550 (1906) p. 41. — Ascomatibus hypophyllis sparsis, obscure griseis, primum globoso-clausis dein hemisphærico-apertis, 1 mm. circ. d., disco griseo-cyaneo prominenti acute marginato præditis; excipulo valde evoluto, obscure griseo; ascis elongato-clavatis, longe pedunculatis, 80-100 \times 9-10, octosporis; sporidiis hyalinis, eguttulatis, ob-

longis v. oblongo-fusoideis, sæpe inæquilateris, 12-15 \times 4; paraphysibus hyalinis, filiformibus, 3 μ . cr.

Hab. in foliis putrescentibus *Quercus* sp., in silvis pr. Rathenow Germaniae. — Excipulo valido a ceteris speciebus valde distincta.

9. **Mollisia papillata** Earle, Bull. of the New York Bot. Gard. (1904) 5551 p. 290. — Ascomatibus sparsis, nigris, cupulatis, rugoso-papillatis, 0,5-1 mm. diam., sessilibus, margine conspicue elevato et sicco recurvato, disco ex obscure ardesiaco nigrescente, excipuli cellulis polygoniis, versus marginem elongatis ibique clavato-papillatis 25 \times 5; ascis confertis, cylindraceis, circ. 50 \times 4; paraphysibus filiformibus; sporidiis oblique monostichis vel subdistichis, hyalinis, continua, cylindraceis, sæpe subcurvulis, 8-10 \times 2.

Hab. in fragmentis ligneis vetustis aeri diu expositis pr. Stanford Univ. California (C. F. BAKER). — *M. melaleucae* (Fr.) Sacc. affinis sed ascomatibus cupulatis nec patellatis, extus magis distin-
cte rugosis, disco obscuriore diversa.

10. **Mollisia Schumacheri** (Fries) Rehm, Ann. Mycol. V (1907) p. 545, 5552
Peziza fusca Schum. non Pers., *Peziza Schumacheri* Fries, Syst. myc. II, p. 98, *Lachnella Schumacheri* Phill. Man. Br. Disc., p. 262, Exs. n. 167, *Trichopeziza fusca* (Schum.) Sacc. — Syll. VIII, p. 414. — Ascomatibus gregariis, sessilibus, plerumque in ligni superficie denigrata, primitus globoso-clausis, diu hemisphæricis, disco plāno, purpureo-fusco vel cinereo, crasse marginato, excipulo fusco, scabriusculo, versus marginem cellulis seriatis distantibus, ceterum parenchymatice contexto, 0,5-2 mm. diam.; ascis clavatis, apice rotundatis, 40-45 \times 6-8, 8-sporis, jodo immutatis; sporidiis fusiformibus, rectis vel subcurvatulis, 1-cellularibus, hyalinis, 9-12 \times 2, distichis; paraphysibus filiformibus 2 μ . versus apicem 3 μ . cr., hyalinis, prominentibus.

Hab. ad ligna emortua in Anglia, Dania. — Pili genuini desunt, hinc *Mollisia* species, non *Lachnella* nec *Trichopeziza*.

11. **Mollisia Copelandi** Rehm, Ann. Mycol. V (1907) p. 545. — Asco- 5553 matibus in maculis irregulariter orbicularibus, plerumque confluentibus, 1-3 mm. lat., cinereo-niveis vel albis, ex parenchymate tenuissimo epiderridis foliorum formatis sparsis, sessilibus, primitus globoso-clausis, dein patellaribus, disco orbiculari, fuscidulo, albido-marginato, plāno, 270 μ . diam., excipulo hyalino parenchymatico; ascis clavatis, sessilibus, 40 \times 12, octosporis, jodo immutatis; sporidiis clavatis, utrinque obtusis, sub medio septatis, haud constrictis.

ctis, hyalinis, 12×4 , strato mucoso, tenuissimo obductis, distichis; paraphysibus conglutinatis, dilute flavidulis; hypothecio flavidulo.

Hab. in epiphylo folii Caryotæ, Zamboarya District, Mindanao, in ins. Philipp. (E. B. COPELAND). — Ob ascomata in maculis foliorum albis insidentia, species *Tapesiam* in memoriam revocat. Si vero sporidia genuine 1-septata sunt, potius *Nipteræ* species videtur.

12. **Mollisia chionea** Mass. et Crossl. — Syll. XIV, p. 775 — var. **macrospora** Boud., Icon. mycol. (1906) n. 192, Hist. et Classif. Discom. Europe p. 138 (1907). — A typo differt sporidiis tantum paulo majoribus.

Hab. in caulis ? Cyperacearum in Gallia.

13. **Mollisia luctuosa** Boud., Icon. Mycol. t. III, tab. 543 (1907), Hist. 5555 et Classif. Discomyc. Europe (1907) pag. 138. — Minuta, 0,5-1,5 mm. lata, tota cinerea, margine pallidore; cupulis primo urceolatis dein explanatis et undulatis, subtus minutissime puberulis, concoloribus, hymenio et carne saturatioribus; ascis clavatis, octosporis, 55-60 \times 8-9; paraphysibus cylindraceis, intus oleosis aut granulosis, 3-5 μ . cr.; sporidiis elongato-fusoideis, saepius 4-guttulatis, rectis aut curvulis, acutiusculis, 18-20 \times 3-3,5; pilis externis brevibus, clavatis, 2-3-articulatis, fuscidulis, intus guttulosis, extus granulosis, 30-50 \times 10-15.

Hab. inter folia putrida Caricis maximæ, Montmorency Gallia.

14. **Mollisia purpurea** Rehm, Ascom. exs. n. 1684, Annales Myc. V (1907) p. 80. — Ascomatibus dispersis, sessilibus, primitus globulo-clausis, dein urceolatis, demum patellaribus, disco orbiculari plano purpureo, margine fusco cincto, excipulo glabro, fusco, parenchymatice contexto, 0,5-1,5 mm. diam., siccis subcomplicatis, cereo-membranaceis; ascis clavatis, apice subacutatis, circ. 70 \times 9, octosporis, jodo cærulescentibus; sporidiis fusoideis, rectis v. curvulis, 1-cellularibus, plerumque cum guttulis 2 oleosis, hyalinis, 12-14 \times 2,5-3, distichis; paraphysibus filiformibus 2 μ ., versus apicem 3-4 μ . cr., guttulis oleosis ochraceis repletis; hymenio dilute olivaceo.

Hab. in medio fasciculi foliorum putridorum Graminis in faucibus « Hœllenthal » sub M Zugspitz alpium Bavariae (REHM). — A *M. citrinuloide* Rehm disci colore diversa, a *M. puccinioide* (De N.) Sacc. sporidiis diversis, a *Moll. caricinella* Br. disci colore etiam diversa. .

15. **Mollisia citrinuloides** Rehm, Ann. Myc. III (1905) p. 226. — Asco- 5557
matibus dispersis, late sessilibus, primitus globoso-clausis, dein di-
sco orbiculari, tenuiter marginato, plano, late aperto, hyalino-fla-
vidulis, demum dilute citrinulis; excipulo parenchymatico, glabro,
versus basim fuscidulo, 0,5-1,5 mm. diam., siccis haud corrugatis,
senilibus nigrescentibus ceraceis; ascis cylindraceo-clavatis, apice
subacutatis, 50-55 \times 6, jodo tinctis, octosporis; sporidiis elongato-
fusoideis, basi acutatis, rectis curvulivis, continuis, hyalinis 10-
12 \times 1,5-2, distichis; paraphysibus filiformibus hyalinis, 2 μ . cr.
Hab. ad culmos putrescentes Moliniæ cæruleæ, Sonntag-
berg Austriae inf. (P. STRASSER). — Habitu *Pezizellaæ citrinulæ*
æmula sed ascomatibus parenchymaticis, lata basi sessilibus mox
dignoscitur.
16. **Mollisia benesuada** (Tul.) Phill. — Syll. VIII, p. 333. — fm. 5558
Hippophaës Rehm, Ann. Myc. III (1905) p. 393 (nomen nudum).
Hab. in ramis putrescentibus Hippophaës rhamnoidis,
prope Warnemünde Mecklenburg Germaniae.
17. **Mollisia Haglundi** Rehm, Österr. bot. Ztschr. LVI (1906) p. 344. 5559
— (Nomen nudum).
Hab. in fragmentis pineis Tunnelschutt prope St. Anton Arl-
berg Austria.
18. **Mollisia Sterei** Rehm, ap. Strasser in Verh. k. k. zool.-bot. Ge- 5560
sell. Wien LVII (1907) p. 325. — (Nomen nudum).
Hab. ad Corticum jonides in ramis fagineis siccis Sonn-
tagberg Austriae inf.
19. **Mollisia culmina** Sacc. — Syll. VIII, p. 336 (*M. cinerea* v. *cul-* 5561
mina) — var. *alpina* Rehm, Österr. bot. Zeitschr. LVI (1906)
p. 344. — (Nomen nudum).
Hab. ad graminea et in Junco Hostii, Austria.

MOLLISIOPSIS Rehm, Ann. Mycol. VI (1908) p. 315 (Etym. *Mollisia*
et *opsis* aspectus). — A genere *Mollisia* paraphysibus lanceolato-
acutatis, longe prominentibus diversa.

1. **Mollisiopsis subcinerea** Rehm, I. c. p. 315. — Ascomatibus gre- 5562
gariis, sessilibus, primitus globoso-clausis, dein orbiculariter expla-
natis, disco hyalino, tenuiter marginato, 0,3-1 mm. diam., extus
glabris, excipulo parenchymatico, versus basim subfuscō, siccis sub-
involutis, disco flavidulo, plerumque albido-marginato; ascis clavatis,
apice rotundatis, 45-50 \times 6-7, octosporis, jodo tinctis; spo-
ridiis subclavatis, rectis, 1-cellularibus, hyalinis, 8-9 \times 2, distichis;

paraphysibus lanceolato-acuminatis, medio 4-5 μ . cr., longe prominentibus.

Hab. ad caules sicclos Thalictri, Lyndonville Amer. bor. (Dr. FAIRMAN). — Modo paraphysibus lanceolato-acutatis a *M. cinnerea* et congeneribus discernenda species.

CHLOROSPLENIUM Karst. Syll. VIII p. 315, X p. 12, XI p. 407, XIV p. 773. XVIII p. 65.

1. **Chlorosplenium lividum** (A. S.) Karst. — Syll. VIII, p. 319 — 5568 Huc ducendum est *Cenangium strobilinum* Sacc., Fungi Ital. f. 1306, seu *Ombrophila strobilina* (A. S.) Rehm, Disc. p. 482.

Hab. in strobiliis Abietis etiam prope Romam (BAGNIS).

PEZICULA Tul. — Syll. VIII p. 73 et 489, X p. 11, XIV p. 773, XVI p. 730.

1. **Pezicula platensis** Speg., Myc. Arg. IV in An. Mus. Buenos Aires 5564 (1909) pag. 447, fig. 37. — Sparsa, minuta, sessilis, lenticularis, fusco-lateritia, 1-1,5 mm. diam., subtus turbinata, disco convexula, testacea, ceraceo-rigidula; ascis majusculis tenuissime tunicatis subsaccatis, densissime tenuiterque paraphysatis, octosporis, apice rotundatis, 140-150 \times 30, deorsum subcuneatis breviterque et crasse pedicellatis, jodo immutatis; sporidiis ellipsoideis, dense minuteque guttulatis, distichis, utrinque obtusis, 20 \times 12-14, plus minus inæquilateris, levibus, hyalinis.

Hab. ad rhizomata Polypodii squamuosi super caudices vetustos, La Plata, Argentina.

2. **Pezicula majuscula** Spegazz., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) pag. 447. — Turbinata, extus ochroleuca, disco concava, livida, insititia, dein cupulato-expansa, breviter crasseque pedicellata, margine integerrima, 5-15 mm. diam., 5-7 mm. alt.; ascis linearibus, filiformi-paraphysatis, apice obtuse rotundatis, deorsum subangustatis longeque pedicellatis, 250 \times 14, parte sporif. 160 μ . long., octosporis, jodo immutatis; sporidiis ellipsoideis, utrinque obtusulis, recte monostichis, 22-24 \times 12, leniter inæquilateris, 2-guttatis, hyalinis.

Hab. ad ramos dejectos putres, Parque Roca pr. Tucumán Argentina.

PYRENOPEZIZA Fuck. — Syll. VIII p. 354, X p. 17, XI p. 409, XVI p. 732, XVIII p. 71.

1. **Pyrenopeziza millegrana** Boud., Icon. Mycol. t. III, tab. 552 (1907), 5566 Hist. et Classif. Discomyc. Europe (1907) p. 133. — *Minutissima*, 0,30-0,60 mm. lata, cinereo-albida, extus fuliginosa; ascomatibus urceolatis margine albido-cinetis, extus fuliginoso-squamulosis, hymenio pallide cinereo; ascis cylindrico-fusiformibus, ad basim vix attenuatis, octosporis, foramine immarginato, 60-70 \times 10-11; paraphysibus tenuibus, ad apicem non incrassatis, pallidis, 3-3,5 μ . cr.; sporidiis fusoideis, intus multi-guttulosis, 22-28 \times 4-5, rectis v. leviter curvatis.

Hab. gregaria ad caules putres *Spirææ Ulmariæ* in silva Montmorency, Gallia. — A *Pyr. pulveracea* et *Ulmariæ* sporidiis majoribus et multiguttulatis bene distincta.

2. **Pyrenopeziza distinguenda** Starb. — Syll. XVI, p. 733 — var. ni- 5567 *grofoliacea* Rehm, Ascom. exs. n. 1683, Ann. Mycol. V (1907) p. 79. — A typo differt mycelio ad folia obscuriore, ascis octosporis, paraphysibus apice crassioribus, 2-3 μ .

Hab. ad folia putrescentia *Cirsii*, Sonntagsberg Austriae inf. (STRASSER).

3. **Pyrenopeziza araucana** Speg., Fungi Chilenses (1910) p. 123. — 5568 Ascomatibus laxe gregariis patellaribus sessilibus, margine involutis, crassiusculis, extus atris glabris, intus pallide carneis, 150-500 μ . diam.; ascis clavulatis modice tenuiterque pedicellatis, 50 \times 4, paraphysibus filiformibus apice non incrassatis, obtusis obvallatis; sporidiis pusillis cylindraceis non v. vix botuliformibus hyalinis, 5-6 \times 1,50-1,75.

Hab. ad ramos emortuos putrescentes *Perseæ Lingue* pr. Ciudad de Valdivia Chile Amer. austr.

4. **Pyrenopeziza Galii** Fuck. Symb. mycol. (1869) pag. 295 — Syll. 5569 VIII, pag. 356 — forma *Lycopi* Kunze F. sel. n. 289 (1877) ut var. *Pyr. Gentianæ*, *Pyrenopeziza Lycopi* Rehm, Disc. p. 626 et 605 (icon) (1892). — Ascomatibus 0,5-1,5 mm. long., 1 mm. lat. brunneis, disco griseo, demum hysterioideis; ascis 50-70 \times 7-9; sporidiis 8-10 \times 3,5-4.

Hab. in caulibus emortuis *Lycopi europæi*, Eisleben Germaniae (KUNZE).

5. **Pyrenopeziza ligni** (Desm.) Sacc. — Syll. VIII, pag. 366 — var. 5570 *Hippophaës* Rehm, Ann. Myc. v. III (1905) p. 393 (*Cenangium*) [Nomen nudum].

Hab. in ramis emortuis Hippophaës rhamnoidis, prope Warnemünde Mecklenburg Germaniae.

6. **Pyrenopeziza placentiformis** (Niessl) Rehm, Discom. p. 613, *Peziza* 5571 *placentiformis* Niessl, Verhandl. zool. bot. Gesellsch. Wien (1858) p. 331, t. 8, f. 3. — Ascomatibus gregariis, primo innatis, urceolatis, clausis, dein erumpentibus et cupuliformibus, basi lata sessilibus, disco concavo rubenti-flavido v. brunneolo, inflexo-margi-nato præditis, extus brunneis et rugulosis, 0,5-1 mm. diam., cerae-ces; ascis clavatis, apice rotundatis, 6-8-sporis; sporidiis ellipsoïdeis, 1-cellularibus, hyalinis; paraphysibus filiformibus sursum clavulatis.

Hab. in ramulis emortuis Sambuci nigræ, Wiltau Tirolie (v. NISSL). — Videtur *P. Ebuli* affinis.

7. **Pyrenopeziza patagonica** Speg., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) p. 448. — Minuta, sessilis, disco concaviusculo, fusco-atra, orbicularis, 0,5-1 mm. diam., subtus convexula, fusco-olivacea, margine acuto minutissime denseque fimbriatulo, pilis acutis hya-lino-fulvellis, 40 \times 2,5 ornato; ascis linearibus apice obtuse rotun-datis, deorsum leniter modice crasseque pedicellatis, 60 \times 6-7, octosporis, paraphysibus filiformibus apice sæpe denticulatis; sporidiis suballantoideis utrinque obtusulis, minutis, hyalinis, obli-que monostichis non v. minute 2-guttulatis, 9-10 \times 3.

Hab. ad ramulos aridos adhuc pendulos Duvaucæ depen-dentis prope Rio Deseado, Patagonia, Argentina.

8. **Pyrenopeziza ? chilensis** Speg., Fungi Chilenses (1910) p. 123. — 5573 Ascomatibus laxe gregariis atris coriacellis sessilibus, udis patellari-applanatis, siccis vix corrugato-contractulis, glabris vel obsoletis-sime pruinuloso-pilosulis, 0,5-2 mm. diam.; ascis subcylindraceis modice pedicellatis, paraphysibus subfiliformibus, sursum lenissime incrassatulis apiceque acutis obvallatis, 50-60 \times 6, octosporis; spo-ridiis mono- v. distichis ellipoideo-subcylindraceis, pusillis, hya-linis, grosse biguttulatis, 6 \times 2,5.

Hab. in ramis emortuis dejectis (Nothofagi?), Cerro Caracol de Concepcion, Chile Amer. austr.

9. **Pyrenopeziza Salicis-capreae** Jaap in Abhandl. Bot. Ver. Prov. Brandenb. LII (1910) p. 123. — Peritheciis arcte gregariis, am-phigenis, primum globosis, dein late depressis, intus pallidis extus obscure brunneis, subrugulosis, siccis fere nigris, 0,2-0,3 mm. latis, contextu parenchymatico nigro ad marginem pallidiore; ascis late clavatis, supra angustatis obtusulis incrassatis, 75-100 \times 16-20, o-

ctosporis; sporidiis irregulariter distichis, ellipsoideis v. elongato-ovoideis, subinæquilateris, supra rotundatis, basi breviter acutatis, hyalinis, 13-22 \times 6-8,5, unilocularibus, quandoque biguttulatis; paraphysibus filiformibus, ramosis, hyalinis, septatis 2-4 μ . cr. supra usque ad 6 μ . claviformi-incrassatis. J +.

Hab. in foliis vetustis Salicis capreæ prope Triglitz in Germania. — Status conidicus adest: *Marsonia salicicola* Bres.

10. **Pyrenopeziza Ellisii** (Rehm) Massée, Journ. of Bot. XXXIV 5575 (1896) pag. 149, t. 357, fig. 6-7; *Peziza denigrata* Ellis N. Am. Fungi n. 565, non J. Kunze, *Niptera Ellisii* Rehm in litt. 1885 ad Ellis — Syll. XI (1895) p. 416 (nomen). — Sparsa v. gregaria, erumpens, primo subglobosa et clausa, dein expansa, tenuis, molliuscula, nigro-grisea, glabra, 0,5-0,7 mm. diam., excipuli cellulæ exterioribus irregulariter polygoniis, 9-12 μ . diam., sursum subparallele elongatis et marginem minute fimbriatum reddentibus, atro-brunneis; strato submarginali ex hyphis hyalinis longis confiato et marginulum album formantibus; ascis clavatis apice tenuatis jodoque tinctis, deorsum in pedicellum longum sæpe curvulum tenuatis, 90-100 \times 10-12, octosporis; sporidiis biseriatis, cylindraceis, utrinque obtusis, continuis, levibus, sæpe curvulis, 2-guttulatis, 14-16 \times 3,5-4; paraphysibus paucis, cylindricis, septatis, 3 μ . cr.

Hab. in culmis emortuis Festucæ tenellæ, Newfield, N. J. et Ammophilæ longifoliae, Montana Amer. bor.

TAPESIA (Pers.) Fuck. — Syll. VIII p. 371, X p. 18, XI p. 410, XIV p. 775, XVI p. 734, XVIII p. 72.

1. **Tapesia epicoladotricha** Sacc., Ann. Mycolog. VI (1908) pag. 565, 5576 tab. XXIV, fig. 5. — Subiculo *Cladotrichi* *Tapesiae*: hyphis sterilibus repentibus iterato-ramosis, septatis, fuligineis, intertextis, fertilibus ascendentibus 150-200 \times 4-5, æque fuligineis, septatis, sursum sepe leviter crassioribus et obsolete denticulato-sporigeris; conidiis oblongis, 1-septato-constrictis, 8,5 \times 4-4,5 fuligineis; ascomatibus subiculo cinctis, plano-scutellatis, pallide cinereis; extus nigris, glabris, 1-3 mm. diam., contextu dense parenchymatico atro-fuligineo; ascis tereti-clavatis, breve stipitatis, apice obtusulis, 50 \times 6-7, octosporis; paraphysibus parcis, filiformibus, ascum non superantibus; sporidiis anguste fusoideis, utrinque acutiusculis, rectis, oblique monostichis, 7-10 \times 1,5-2, hyalinis, biguttulatis.

Hab. in lignis putrescentibus (Liriodendri?), Lyndonville

Junio 1908 (FAIRMAN). — *Cladotrichi* subiculum cum *Tapesia* videtur vere connexum.

2. *Tapesia secamenti* Fairm., Ann. Mycol. VIII (1910) p. 329. — Subiculo primo radiatim gossypino, dein effuso et dense implicato, ex hyphis simplicibus v. subramosis, continuis, glabris, hyalinis, 3 μ . latis composito; cupulis primitus subglobosis, dein expansis, fuligineo-atris v. fusco-olivaceis, sessilibus; ascis fusoideo-cylindraceis, 57 \times 6-7; paraphysibus indistinctis; sporidiis monostichis, hyalinis, continuis, ellipsoideis v. fusoideis, 7-10 \times 2-3.

Hab. in assulis vetustis dejectis Betulæ in silvis prope Lyndonville N. Y. Amer. bor. — *Tap. byssinæ* affinis.

HYPHODISCUS Kirschst., Verh. Bot. Ver. Brandenb. XLVIII, p. 44 (Etym. *hypha* et *discus* ob ascoma *subiculo* insidens). — Ascomata in subiculo effuso incidentia, ceracea, primum globosa, clausa, demum appланato-discoidea, excipulo brunneo ex cellulis globosis sursum marginem versus filiformibus formato. Ascii cylindracei v. clavati, octospori. Sporidia globosa. — Ab analogis gen. *Tapesia* et *Trichobelonio* sporidiis globosis præcipue differt.

1. *Hyphodiscus gregarius* Kirschst., l. c. p. 44, cum icon. — Ascomatibus gregariis in subiculo effuso primum albo-griseo demum olivaceo incidentibus, disco griseo-flavido, minute pruinoso marginato, 250-500 μ . diam.; excipulo bene evoluto, flavo-brunneo; ascis cylindraceo-clavatis, supra rotundatis, 35-45 \times 4-5, octosporis; sporidiis mono- v. distichis, globosis, levibus, hyalinis, 2 μ . diam.; paraphysibus filiformibus, continuis, 2 μ . cr.

Hab. in ligno putri Rhamni Frangulae, in silvis pr. Rathenow Germaniae.

DESMAZIERELLA Lib. — Syll. VIII p. 386.

1. *Desmazierella foliicola* Rick, Broteria V (1906) p. 33. — Ascomata tibus appланatis, sessilibus, tenuibus, subhyalinis, ceraceis, extus ad marginem pilis rigidis, rarissimis, 1 mm. longis obsitis, crinibus brunneis, septatis, obtuse apiculatis; ascis 160 μ . long., 10 μ . latis; sporidiis hyalinis, ellipsoideis, uniserialibus, unilocularibus, 12-17 μ . long., 10 μ . latis, membrana granulata; paraphysibus filiformibus, hyalinis, 4 μ . crassis, versus apicem parum incrassatis, discum superantibus.

Hab. in foliis deciduis, Rio Grande do Sul Brasilie.

2. **Desmazierella bulgaroides** Rick, in Ann. Mycol. III (1905) p. 238. 5580

Ascomatibus sessilibus, superficialibus, usque ad 1 cm. latis, valde undulatis, tenacibus, gelatinosis, fuligineo-atris, pilis rigidis brunneis, multiseptatis, nodulosis, apice subrotundatis, 200-300 \times 10 conispersis, disco marginato, primitus clauso et dilute vinoso, dein aperto et fuligineo-atro, verrucis et setulis rigidis brunneis, multiseptatis, nodulosis, apice subrotundatis 200 \times 10 undique obsito; ascis linearibus vel cylindricis, circ. 120 \times 8-10, arcte conglutinatis et unitis cum paraphysibus in massam gelatinosam diffusis; sporidiis clavatis vel cylindricis vel etiam subfusiformibus, 12-17 \times 3-4, unicellularibus, denique spurie septatis, subflavidulis, membra levi, subinaequilateralibus (immaturis guttulatis et multo majoribus); paraphysibus filiformibus, flaccidis, versus pedem in stratum gelatinosum diffluentibus, versus apicem incrassatis, subviridulis, epithecium non formantibus.

Hab. in trunco putrido, Theewald in Brasilia. — A typo generis satis desciscit.

ERIOPEZIA Sacc. — Syll. VIII p. 381, XVIII p. 73.1. **Eriopezia albo-lateritia** Rehm in Jaap, Verh. bot. Ver. Prov. Brandenb. LII (1910) p. 114. — (Nomen nudum).

Hab. in ligno quercino putri prope Triglitz in Brandenburgia. — Cum *Tapesia cruenta* P. Henn. comparanda dicitur.

PIROTTÆA Sacc. — Syll. VIII p. 386, X p. 19, XIV p. 776, XVIII p. 73.1. **Pirottæa Pini** v. Höhnel, Fragm. z. Myk., Sitzb. k. Ak. d. Wiss. 5582 Wien, Bd. CXVI, Abt. I (1907) p. 135. — Ascomatibus in parvos greges dispositis, 180-200 μ . latis, supra depresso-depressis, disco albidio, infra in pedicellum 60 \times 40 conoideo-angustatis, superficialibus, extus brunneis; excipulo tenui setulis rigidis numerosis, nigris, acutis, unilocularibus, usque ad 120 \times 3-5 tecto; margine ascomatum ciliolato, ciliis 1-2-stratosis, cylindraceis, supra rotundatis, brunneis 40 \times 4-5; paraphysibus sparsis, tenui-filiformibus, hyalinis; ascis clavatis, basi breviter angustato-pedicellatis, 32 \times 6, octosporis; sporidiis unilocularibus, tenuiter tunicatis, hyalinis, fusoides, utrinque plerumque acutatis, 10-18 \times 1,6-2. J +.

Hab. in cortice putrescenti Pini silvestris, Steinberg Wienerwald Austriae inf. — *Pir. mimatensi* P. et R. et *P. venturioidi* S. et R. affinis sed distincta.

2. *Piottæa Bongardii* (Weinm.) Rehm, ap. Jaap in Abh. Bot. Ver. 5588
Prov. Brandenb. IL (1907) pag. 12. — Ita vocanda *Pyrenopeziza*
Bongardi (Weinm.) Sacc. — Syll. VIII, p. 358.

LACHNELLULA Karst. — Syll. VIII p. 390, XI p. 411, XVIII
p. 76.

1. *Lachnellula calva* Rick, Broteria V (1906) p. 34. — Ascomatibus 5584
gregariis, 1-2 mm. latis, fere sessilibus, pruinosis, subvillosis, pri-
mitus calyciformibus, fulvo-ferrugineis, disco lobato-undulato, mar-
gine determinato, albo-sericeo; ascis subcylindraceis, breviter pe-
dicellatis, 40-50 \times 5-7, octosporis; sporidiis sphæroideis, unicellula-
ribus, hyalinis 2,5-3 μ . cr., guttulatis, membrana incrassata; pa-
raphysibus linearibus obvallantibus, sepe furcatis.

Hab. in ligno arborum frondosarum putrido, Rio Grande do
Sul Brasiliæ. — Primo intuitu videtur *Dasyscypha* ob naturam
indumenti pilorum, sed sporidiis sphæroideis evidenter demonstra-
tur *Lachnellula*.

LACHNELLA Fr. — Syll. VIII p. 391, X p. 19, XI p. 411, XIV
p. 777, XVI p. 334, XVIII p. 76.

1. *Lachnella Bresadolæ* Strasser, Verh. zool. bot. Gesellsch. Wien 5585
LVII (1907) p. 334. — Ascomatibus gregariis v. sparsis, sessili-
bus, primum globoso-clausis dein rotundato-apertis et discum pal-
lide flavidum suburceolatum demumque parum depresso ostenditibus;
excipulo rubro-brunneo, pilis incoloribus asperulis 160-
200 \times 3-4, obtusis, basi septatis, brunneolis, supra incoloribus dense
tecto; ascomatibus udis albo-griseis, siccis olivaceo-griseis et mar-
gine convolutis; ascis breviter pedicellatis, cylindraceis, supra de-
presse rotundatis, basi parum clavato-angustatis, 60-80(100) \times 8-
10; sporidiis distichis, cylindraceis, hyalinis. plerumque biloculari-
bus, nonnullis vero septo fere indistincto, rectis v. curvulis, raro
biguttulatis, 12-16 \times 3-3,5; paraphysibus filiformibus, hyalinis, 2-3
u. cr.

Hab. in fragmentis ligneis siccis Piri Mali, Sonntagberg Au-
striæ inf. — *Lach. flammææ* (Alb. et Schw.) affinis.

2. *Lachnella Philadelphi* Rehm, Ann. Mycol. VII (1909) pag. 525, 5586
Ascom. Exsicc. fasc. 45, n. 1855. — Ascomatibus gregariis, sessili-
bus, primitus globoso-clausis, mox urceolatis, dein patellaribus, or-
bicularibus, 1-3 mm. diam., disco albido, excipulo crasso, paren-
chymatice contexto, intus hyalino, extus subfusco, pilis simplici-

bus, rectis, versus apicem plerumque acutatis, septatis, crasse asperulatis, interioribus fere hyalinis, externis rubeolo-fuscidulis, versus apicem hyalinis, $300 \times 5-7$ obtecto; ascis elongatis, apice rotundatis v. subacutatis, $75-80 \times 8-10$, 4-8-sporis, jodo tinctis; sporidiis clavatis, medio septatis, hyalinis, $10 \times 2-2,5$, distichis; paraphysibus sparsis, rarissime subacutatis et prominentibus, hyalinis, $2-3 \mu$ cr.; hypothecio crystallis oxalato-calcicis prædicto.

Hab. ad ramos Philadelphi coronariis, Park Kleinziegenfeld prope Weismain Franconia sup. (ADE).

3. *Lachnella andina* Speg., Myc. Arg. IV, in An. Mus. Buenos Aires 5587 (1909) p. 449. — Parva, gregaria, subsessilis, extus dense fibrillosa, ferruginea, patellari-applanata, sicca subglobosa, $0,3-1$ mm. diam., disco concaviusculo levissimo; ascis subclavulatis, apice rotundatis, sensim longeque pedicellatis, $75-95 \times 8-9$, crasse paraphysatis, jodo fere immutatis; sporidiis inordinate dispositis, botuliformibus, utrinque obtusiusculis, $10 \times 2-2,5$, saepius valde incurvatis, hyalinis, eguttulatis.

Hab. ad ramulos aridos et decorticatos Patagonii pinifoli, Puente del Inca pr. Mendoza, Argentina. — *Lachnella barbatæ* peraffinis sed certe distincta.

LACHNUM Retz — Syll. XVIII p. 77 (Etym. *lachne* villus) *Dasyscypha* et *Trichopeziza* Auct. ex p. et Syll. ex p. — Ab his generibus imprimis paraphysibus fusoideis, apice acutis, plerumque ascis superantibus dignoscendum. — Et certe horum generum plurimæ species hoc transferendæ sunt.

1. *Lachnum Astragali* v. Höhn., Ann. Naturhist. Hofmus. Wien XX, 5588 Heft 4 (1905) p. 4. — Ascomatibus plerumque 1-1,5 mm. lat., breviter et tenuiter pedicellatis, siccis globosis, albis et albo-pulveraceo-pilosus, pallide aurantiacus, hemisphaericis, margine incurvatis, extus pilis crassis usque ad 200×4 tectis; ascis clavatis, sessilibus, plerumque $60-90 \times 8$, octosporis; paraphysibus numerosis 4μ c. crassis, acute lanceolatis, flavo-aurantiaco-guttulatis, ascis long. superantibus; sporidiis mono- v. distichis, hyalinis, unilocularibus, rectis v. curvulis, utrinque attenuatis et obtusis. $10-15 \times 3-4$; Jodi ope poro asc. fortiter cyaneo-colorato.

Hab. in caulibus Astragali sp., Erdschias-Dagh, 2300-2900 m. alt. in Asia minore.

2. *Lachnum contractum* Karst., Acta Soc. pro Faun. et Fl. fenn. 5589 XXVII, 4 (1905) p. 6. — Ascomatibus sparsis, sessilibus, planiu-

sculis v. concaviusculis, siccitate varie contractis, striguloso-villosis, fuscis, 1-1,5 mm. lat., pilis hyalino-flavescentibus (sub lente), strictis, asperis, haud v. obsolete articulatis, usque ad 100 \approx 2-4; ascis cylindraceo-clavatis; sporidiis distichis, fusoideo-filiformibus v. fusoideo-elongatis, rectis, 8-12 \approx 1; paraphysibus acutatis.

Hab. in caulinis aridis Spirææ prope lacum Baical Sibiræ or. (O. LÖNNEBOHM).

3. *Lachnum setigerum* (Phill.) Rehm, Ascom. Amer. bor., Ann. Myc. 5590 v. III (1905) pag. 518. Ita vocanda *Trichopeziza setigera* (Phill.) Sacc. — Syll. VIII, pag. 407. — Ascomate brevissime stipitato, pilis rectis, ad apicem acutis, multoties septatis, flavo-fuscis, c. 300 \approx 4-5, interdum fasciculatim conglutinatis obpresso; ascis cylindraceo-clavatis, apice rotundatis, 90-100 \approx 7-8, octosporis, poro jodo tincto; sporidiis fusiformibus, 1-cellularibus, hyalinis, 15-20 \approx 3, distichis; paraphysibus filiformibus, hyalinis, 2 μ ., versus apicem lanceolato-acutatis, 4 μ . cr., supra ascos prominentibus:

Hab. in caulinis Araliæ, Veratri etc. in America bor.

4. *Lachnum nidulus* Schm. et Kunze — Syll. VIII, p. 408 (*Trichopeziza*) — var. *Eupatorii* Bres. in Strasser, III Nachtr. Pilzfl. Sonntabg. (Verhandl. zool. bot. Gesell. Wien 1905) p. 612). — Ascomatibus confertis; pilis brunneis septatis superne incrassatis, 80 \approx 8-10; ascis 40-48 \approx 4-6; sporidiis 8-12 \approx 1-1,5.

Hab. in Eupatorio cannabino, Sonntagberg Austria inf. — Var. *Ulmariæ* Jaap, Verh. bot. Ver. Prov. Brandenburg, LII (1910) p. 116. (Nomen nudum). — Ad basim caulum vetustorum Spirææ Ulmariae prope Triglitz Germania.

5. *Lachnum niveum* (Hedw.) Karst. — Syll. VIII, p. 437 (*Dasysscypha*) 5592 — var. *Fairmani* Rehm, Ann. Mycol. VI (1908) p. 316. — Ascomatibus gregariis, sessilibus, elongato-cyathoideis, dein distinete tenuiter stipitatis, niveo-albis, primitus clausis, dein disco urceolato, hyalino vel roseolo, 0,3-1 mm. latis, usque ad 1 mm. altis, pilis rectis, simplicibus, septatis, hyalinis, scabris, 50-60 \approx 3-4, versus apicem usque ad 8 μ . latis obtectis; ascis clavatis, 40-45 \approx 6-7, octosporis, jodo tinctis; sporidiis fusiformibus, 1-cellularibus, rectis, hyalinis, 9 \approx 2, distichis; paraphysibus filiformibus, 2-3 μ . cr., subobtusis, prominentibus.

Hab. ad caules emortuos Solidaginis, Lyndonville N. Y., Amer. bor. (E. FAIRMAN). — A typo imprimis indumento breviori dignoscendum.

6. *Lachnum hyalinellum* Rehm — Syll. XI, p. 413 (*Dasysscypha*) — 5593

- var. *fructincola* Rehm in Sydow, Ann. Mycol. V (1907) p. 398;
Mycoth. germ. n. 611. — Matrice tantum a typo recedere videtur.
Hab. in pericarpis siccis Fagi silvatici, Tamsel Germania.
7. *Lachnum clavicomatum* Kirschst., Verh. Bot. Ver. Brandenburg. 5594 XLVIII (1906) p. 46. — Ascomatibus gregariis, sessilibus, $\frac{1}{2}$ - $\frac{3}{4}$ mm. diam., pilis brunneis 120-150 \times 5, supra flavidis et usque ad 9 μ . subclavato-incrassatis, pluries septatis, rectis obsitis; excipulo brunneolo; disco albo-lacteo; ascis cylindraceo-clavatis in pedicellum tenuatis, 50-56 \times 5-6, supra rotundatis, octosporis; sporidiis distichis, subparallelis, hyalinis, cylindraceis v. fusoideis, 8-14 \times 1,5-2; paraphysibus lanceolatis, basi 5 μ . cr.
Hab. in ramulis salicinis putrescentibus prope Rathenow Germania.
8. *Lachnum coarctatum* Karst., Acta Soc. pro Faun. et Fl. fenn. 5595 XXVII, 4 (1905) p. 6. — Ascomatibus gregariis, sessilibus, globosis, margine valde contractis, minute apertis, brunneis v. atrofuscis, villosulis, circiter 0,8 mm. diam.; pilis flexuosis, vix articulatis, dilute fuligineis (sub microsc.), circ. 2 μ . cr.; ascis cylindraceo-clavatis 70-80 \times 4-5; sporidiis distichis, fusoideo-elongatis, rectis, 5-8 \times 1-1,5; paraphysibus parcis, filiformibus.
Hab. in caulinis Urticæ dioicæ prope Kuopio Fennia (O. LÖNNBOHM).
9. *Lachnum calyciforme* (Schum.) Karst. — Syll. VIII, pag. 454 5596 (*Dasyssypha*) — var. *cypbelliforme* Rehm, Verh. k. k. zool. bot. Gesellsch. Wien LVII (1907) p. 338. — Disco udo albido-flavo, paraphysibus distincte lanceolatis; ascis' 48-60 \times 6-7; sporidiis unicolaribus, obtuse fusoideis, 8-10 \times 2-3.
Hab. ad corticem Laricis dejectum, Sonntagberg Austriae inf.
10. *Lachnum olivaceo-sulphureum* Rick, Broteria v. V (1906) p. 34. — 5597 Ascomatibus gregariis, 1-2 mm. latis, breviter stipitatis, extus pilosis, pilis usque ad 100 μ . longis, 5 μ . latis, obtusis, olivaceo-sulphureis, crystalliferis, disco isabellino v. livide melleo; ascis 50 \times 6, octosporis; sporidiis ellipsoideis v. ovalibus, 5-7 \times 3-4, uno apice compressis, uniserialibus, unicellularibus, hyalinis, eguttulatis; paraphysibus linearibus, versus apicem hyalinis, lanceolatis, 3-4 μ . latis.
Hab. in ligno duro arboris frondosæ, Rio Grande do Sul Brasilie.
11. *Lachnum fusco-floccosum* Rehm, Ann. Mycol. V (1907) p. 520. 5598 — Ascomatibus gregariis, sessilibus, primitus globoso-clausis, dein

urceolatis, disco subcarneo, excipulo fuscidulo in stipitem brevissimum cylindraceum subglabrum elongato, 0,3 mm. diam., pilis multoties curvatis in infera parte, versus apicem rectis, obtusis, glabris, fuscidulis, creberrimis, ca. 500 \times 4 obtecto, ad marginem pilis modo ca. 90 μ . longis; ascis cylindraceis, 50 \times 4, octosporis; jodo tinctis; sporidiis fuscoideo-oblongis, interdum curvatulis, hyalinis, demum medio septatis, 8-9 \times 1,5, distichis; paraphysibus lanceolatis, sursum acutatis, longe prominentibus.

Hab. ad ramos, Sumner Washington Amer. bor. (HARPER). —

— *L. calyculiformi* subaffine.

12. *Lachnum distinguendum* Rick, Broteria V (1906) p. 33. — Ascomatibus 2 mm. latis, disco hyalino, marginato, niveis, crinitis; setulis apice angustatis, crystalliferis, ramosis; stipite 1 mm. alto, albo, pruinato; ascis 50-60 \times 7-10; sporidiis fuscoideis, hyalinis, unilocularibus, 10-15 \times 3-4, aliis etiam multo minoribus; paraphysibus sursum lanceolatis, latitudine ascorum, plerumque eguttulatis.

Hab. ad ligna putrida, Rio Grande do Sul Brasiliæ. — Macroscopice valde similis species *Dasyscyphae distinguendæ*. Sporidiorum differentia speciem hanc cognitu facilem reddit.

13. *Lachnum controversum* (Cooke) Rehm — Syll. VIII, pag. 447 5600 (*Dasyscypha*) — fm. *caricicola* Jaap, Abh. Bot. Ver. Prov. Brandenb. IL (1907) p. 9. — A typo differt matrice et omnibus partibus magnitudine minore.

Hab. in foliis vetustis *Caricis acutiformis*, prope Triglitz Brandenburgia.

14. *Lachnum tenue* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII 5601 (1906) p. 45. — Ascomatibus sparsis, longe et tenue pedunculatis, minutis, albis, primum globosis, dein poculiformibus et discum flavidulum ostendentibus, extus pruinosis et pilis levibus supra obtusis asperulis tectis; ascis cylindraceis, sessilibus, supra rotundatis, 27-30 \times 3, octosporis; sporidiis distichis v. raro oblique monostichis, fuscoideis, utrinque rotundatis, 8-12 \times 0,5-1, hyalinis; paraphysibus lanceolatis, acutatis, ascos dimidio superantibus, usque ad 3 μ . cr.

Hab. in foliis emortuis *Caricis hirtæ*, in silvis prope Rathenow Germaniæ. — Sporidiis angustis a ceteris speciebus distinctum.

15. *Lachnum bambusicola* Rick, Broteria V (1906) p. 33. — Ascomatibus gregariis, breviter stipitatis, ceraceis, 1 mm. latis, extus albo-villosis, disco, in sicco, subflavescens; ascis circ. 65 \times 10, apice

subcompressis, octosporis, vix pedicellatis; sporidiis fusiformibus, utrinque acutissimis, $30 \times 2-3$, guttulatis, multiserialibus, hyalinis, unilocularibus; paraphysibus 3-4 μ . latis, versus apicem lanceolatis, hyalinis.

Hab. in ramis *Bambusæ*, Rio Grande do Sul Brasiliæ. — *Erinellæ* habitu et sporarum forma vix dissimile, sed est *Lachnum genuinum* sporidiis continuis et paraphysibus lanceolatis.

16. *Lachnum Enzenspergerianum* P. Henn., Deutsche Südpolar-Exped. 5608 Bd. VIII (1906) Extr. p. 6, tab. I, fig. 5, a, e. — Ascomatibus ceraceis, sparsis v. subgregariis, stipitatis v. subsessilibus, cupulatis, flavo-carneis, pilosis, c. 250-300 \times 200-230, margine pilis erectis sicco flexuosis, hyalinis, obtusis, septulatis, subgranulosis, 30-80 \times 4-5 vestitis, disco concavo, pallido v. subincarnato, ceraceo; stipite brevi, cylindraceo, usque ad 100 \times 100; ascis clavatis obtusis, octosporis, 50-65 \times 5-7; paraphysibus superantibus, lanceolatis, acutis, septatis, hyalinis, 4-5 μ . cr.; sporidiis oblique monostichis v. subdistichis, fusoides, acutis v. obtusiusculis, intus minute guttulatis, continuis, hyalinis, 9-12 \times 2-2,5.

Hab. in foliis *Poæ Cookii* in insulis Possessionis, Crozet-Gruppe (E. WINKLER).

17. *Lachnum helotioides* Rehm in Syd. Mycoh. march. n. 1479 et 5604 Discom. p. 884 (1893). — Ascomatibus, subsolitariis, sessilibus, pro more brevissime et tenuiter stipitatis, primo globosis, clausis, dein circulari-apertis et discum concavum, tenuiter maginatum ostendentibus, fere zehrois, diaphanis, extus pilis simplicibus, copiosis, obtusis, septatis, glabris, hyalinis, 30-45 \times 3-4, dense puberulis, siccis albis v. flavidulis, tenuiter ceraceis; ascis clavatis, supra rotundatis, 36-45 \times 5-6, octosporis, paraphysibus lanceolatis, hyalinis, 5 μ . cr. ascos superantibus obvallatis, apice jodo cærulescentibus; sporidiis subcylindricis, obtusis, rectis v. curvulis, continuis, hyalinis, 8-12 \times 2-2,5, distichis.

Hab. in foliis adhuc stantibus *Caricis acutiformis*, Grunewald pr. Berlin Germaniae (SYDOW). — Var. *Ammophilæ* Rehm, Ann. Myc. III (1905) p. 393. — A typo differt sporidiis minibus $8,5 \times 1,5$. — In foliis putrescentibus *Ammophilæ arenariæ* prope Warnemünde Mecklenburg Germaniae.

- HELOLACHNUM** Torrend, Bræteria (1910) p. 53 (Etym. *helos* locus uodus et *Lachnum*). — Characteres *Lachni* sed ascoma pilis destitutum. — *Helolachnum aurantiacum* Torrend, l. c., cum icone. — Gregarium 5605

breve stipitatum, pulchre aurantiacum, majuscum, 4-10 mm. lat., 4-7 mm. alt.; disco primum concavo et margine circiter 0,5 mm. munito, deinde explanato, extus furfuraceo; stipite 3-5 mm. longo, albescente; ascis clavatis, octosporis, 75-100 \times 5-7; paraphysibus circ. 16-20 μ . superantibus, sursum lanceolatis, ab basim cuspidis septatis, 100-120 \times 2,5-4; sporidiis acute fusoideis, interdum obtuse ellipsoideis, imo subcuneiformibus, 10-13 \times 1,5-3, hyalinis, levibus.

Hab. ad radices *Ulicis europæi*, locis humidis et arenosis prope Tagum, Quinta da Infante, Lusitania. — *Habitus quasi Heletii tubæ.*

TRICHOPEZIZA Fuck. — Syll. VIII p. 401, X p. 20, XI p. 412, XIV p. 777 et 1137, XVI p. 1148, XVIII p. 80.

1. **Trichopeziza Harmandi** Vouaux, Bull. Soc. Mycol. Fr. (1910) p. 153. 5606

— Ascomatibus sparsis, sessilibus, basi attenuatis, superficialibus, primum urceolatis dein scutellatis distinque marginatis, 0,2-0,3 mm. lat.; disco ceraceo, sordide violaceo; extus pallidius violaceis subpallideque pulverulentis; pilis hyalinis tectis, simplicibus, esepitatis, levibus, basi fusca longius crassioribus, atque apice parum inflato obtusoque uncinatis, 30-40 \times 1, basi 12-14 \times 3-4; ascis clavatis, apice rotundatis, breviter noduloso-stipitatis, 30 \times 5, octosporis; foramine immarginato; sporidiis elongato-ellipsoideis, simplicibus, hyalinis, biguttulatis, 7 \times 2,5; paraphysibus filiformibus 3-4-septatis, apice aliquantulum crassioribus, circ. 2 μ . cr., saepissime basi ramosis.

Hab. in cortice *Aceris Pseudoplatani*, Docelles Vosges Gallia (Abb. HARMAND). — *Dasycephalæ hyalotrichæ* Rehm (quaetiam ad gen. *Trichopezizam* pertinere videtur) affinis, a qua differt colore et forma pilorum nec non statura minore ascorum sporidiorumque.

2. **Trichopeziza marchica** Kirschst., Verh. Botan. Ver. Brandenb. 5607

XLVIII (1906) p. 46. — Ascomatibus in maculis nigricantibus gregariis, sessilibus, pallide brunneis, præcipue ad marginem pilis numerosis, longis, hyalinis obsitis, primum hemisphaericis, dein applanatis, c. $\frac{1}{4}$ mm. diam.; ascis sessilibus, cylindraceis, supra rotundatis, 34-36 \times 4-5, octosporis; sporidiis oblique monostichis, hyalinis, ellipsoideis, unilocularibus, bi-raro-triguttulatis, 4-6 \times 1,5-2; paraphysibus paucis, filiformibus.

Hab. in foliis pineis putrescentibus, in silvis prope Rathenow Germaniae.

3. *Trichopeziza Galii* Boud., Icon. Mycol. t. III, tab. 536 (1907), Hist. 5608 et Classif. Discomyc. Europe (1907) p. 132. — *Minutissima*, 0,30-0,50 mm. lata, sessilis, albido-cinerea, urceolata, dein expansa, vix roseola, margine pallidiore; extus ad marginem pilis brevibus, obtusis, albis, septatis et extus granulosis; ascis cylindrico-clavatis, octosporis, 40-50 \times 5-7; paraphysibus tenuiter lanceolatis, albis, rarius filiformibus, intus subgranulosis, 2-3 μ . cr.; sporidiis oblongo-fusoideis, saepe subclavatis, hyalinis, non guttulatis, 9-10 \times 2-3.
Hab. in caulibus emortuis Galii Aparines, Montmorency Gallia. — Inter *Lachnellam* et *Trichopezizam* media.
4. *Trichopeziza valparadisiaca* Speg., Fungi Chilenses (1910) p. 125, 5609 cum icon. — Ascomatibus pusillis dense constipatis, superficialibus, turbinatis, breviter pedicellatis densiuscule villosis, ochroleucis, 150-300 μ . diam., pilis simplicibus non capitatis, levibus 1-3-cellularibus, 50 \times 2-3; ascis subclavulatis breviuscule pedicellatis, 30 \times 4, paraphysibus sursum vix incrassatis obtusis, non longioribus cinctis; sporidiis pusillis ellipsoideis hyalinis minutis biguttulatis, 4 \times 1,5, unilocularibus.
Hab. ad folia emortua Puyæ chilensis, Cerro Alegre de Valparaiso Chile Amer. austr.
5. *Trichopeziza velutina* (St. Amand) Sacc. et Trott., *Peziza velutina* 5610 St. Amand Fl. agenaise, Agen, 1821, p. 531. — *Minutissima*; ascomatibus subsessilibus, primo globulosis, dein oblongatis v. difformibus, flavidis, piloso-velutinis, senio nigricantibus, plerumque dense aggregatis.
Hab. inter muscos et hepaticas ad cortices arborum in agro Agen Galliæ. — Verisimiliter affinis *Tr. sulphureæ*, *Tr. leucophææ* etc.

UNGUICULARIA v. Höhn., Ann. Mycol. (1905) p. 404 (Etym. *unguicula* ob pilorum formam). — Ascomata parva, superficialiter insidentia, basi angustata extus pilosa, pilis crasse tunicatis; contextu minute parenchymatico-fibroso; asci clavati, octospori; sporidia 2- vel 3-sticha, unilocularia, elongata; paraphyses tenues. — A *Pezizella* et *Dasyphypha* differt præcipue pilis crassissime tunicatis, acuminate. Cfr. quoque v. Höhn. in Sitzungsb. K. Akad. Wiss. Wien, CXV (1906) p. 93 (gen. *Unguiculella* v. Höhn.).

1. *Unguicularia unguiculata* v. Höhn., l. c. cum icon. — Ascomatibus sessilibus, albo-carneis, primum globoso-clausis dein discoideo-apertis, albis v. pallidis, 200-400 μ . diam., pilis plerumque irregu-

lariter incurvatis, hyalinis, 40-60 \times 7-9; ascis tenuiter tunicatis, acute clavatis, octosporis, 40-60 \times 6-7; paraphysibus numerosis, $1/2$, μ . cr., filiformibus; sporidiis distichis, unilocularibus, hyalinis, fuscoideis, utrinque acutatis, 9-12 \times 2-3; J +.

Hab. in foliis abietinis dejectis putrescentibus prope Unter-Tullnerbach Wiener Wald Austriae.

2. *Unguicularia hedericola* Rehm, in Strasser, Verh. k. k. z. bot. Ges. 5612 Wien LX (1910) p. 469. — Ascomatibus gregariis, sessilibus, primus globoso-clausis, dein disco orbiculari, 0,1-0,15 mm. diam., hyalino-fuscidulo, excipulo-flavescente, versus marginem prosenchymatice contextis, hyphis marginalibus cellulitis conoideis, demum tenuiter hamulato-reflexis, scabris, 15-18 μ . long. ad basim 5 μ . lat. coronatis, siccis contractis: ascis clavatis, apice rotundatis, 40-45 \times 7-8, octosporis, jodo immutatis; sporidiis obliquis, unicellularibus, biguttatis, hyalinis, 5-8 \times 3,5-4, plerumque monostichis; paraphysibus filiformibus, hyalinis, ad apicem 1,5-2 μ . cr.

Hab. in ramulo Hederæ Helicis decorticato, Hollenstein Austria inf.

3. *Unguicularia falcipila* v. Höhn., Sitzb. k. Ak. d. Wiss. Wien CXV, 5618 Abt. I (1906) p. 654. — Ascomatibus superficialibus late insidentibus, applanatis, tenuibus, solitariis v. gregariis, pallide carneis, 100-240 μ . diam., extus pilis hyalinis, unicellularibus, 20-24 μ . long., basi 3-4 μ . lat. fortiter hamatis vestitis; ascis late insidentibus, clavatis, obtusis, tenui tunicatis, tunica supra usque ad 2 μ . cr., octosporis; sporidiis distichis, hyalinis, unilocularibus, elongatis, subcylindraceis, rectis v. vix incurvatis, minute uni- v. bигuttulatis, utrinque rotundatis, 5,5-7 \times 1,5-2; paraphysibus paucis filiformibus; J -.

Hab. in caulibus putrescentibus Urticæ dioicæ, Wiesenbach-tal Austriae inf.

4. *Unguicularia limosa* Rehm in Jaap, Abh. Bot. Ver. Prov. Brandenburg. LII (1910) p. 118. — (Nomen nudum).

Hab. in caulibus putrescentibus Equiseti limosi prope Triglitz in Germania.

DASYSCYPHA (Fr.) Fuck. — Syll. VIII p. 432, X p. 21, XI p. 412, XIV p. 779, XVI p. 785, XVIII p. 81.

1. *Dasyscypha Rosea* Jaap, Verh. Bot. Ver. Prov. Brand., L (1908) 5615 p. 31. — Ascomatibus minutis, gregariis, plerumque hypophyllis, sessilibus, primum globoso-clausis, dein circulariter apertis et discum

pallidum ostendentibus, margine incurvato, flavis et pilis flavidis 2,5-3,5 μ . cr., basi septatis et 100-200 μ . long. præditis; siccis fere globosis et flavo-brunneis, subverrucoso-rugosis, tenui-ceraceis; ascis elongato-clavatis, supra obtuse acutatis, 25-32 \times 5-6, octosporis; sporidiis elongatis v. subclavatis, 5-8 \times 1,5, rectis, unilocularibus, sæpe biguttulatis, hyalinis, oblique distichis; paraphysibus filiformibus, obtusis, 2 μ . cr.; J+.

Hab. in foliis vetustis Rosæ centifoliæ prope Triglitz in Brandenburgia Germaniæ.

2. *Dasyscypha campylotrichia* A. L. Sm., Trans. Brit. Mycol. Soc. 5616 (1908) v. III (1909) p. 112, tab. VI, fig. 3. — Ascomatibus minutis, 150-200 μ . circ. diam., sparsis v. subgregariis, primum clausis, siccis flavo-citrinis, udis apertis et discum parum ostendentibus, extus et præcipue ad marginem pilosis, pilis sursum subulatis, subincurvatis 30-45 \times 4 præditis; ascis clavatis breviter stipitatis, circ. 35 \times 8; sporidiis parvis, ellipsoideis, hyalinis, 5 \times 2.

Hab. in caulinis Cardui spec., Scone Perthshire Britannia (MENZIES).

3. *Dasyscypha pulverulenta* (Lib.) Sacc. — Syll. VIII, pag. 462. — 5617 var. *conicola* Rehm in Sydow, Ann. Mycol. (1910) p. 492, Myc. Germ. n. 907. — A typo differt pilis non resiniferis.

Hab. ad squamas conorum Pini, Triglitz? in Germania. — Probabiliter eadem est var. *conorum* Rehm in Jaap, Verhandl. bot. Ver. Brandenb. LII (1910) p. 115. — Var. *purpurascens* Rehm, Ascom. Exsicc. fasc. 46, n. 1877, Ann. Mycol. (1910) p. 298. — A typo differt pilis rectis, asperis, hyalinis, 60 \times 4, contentu crystalloideo-resinoso rubro-brunneo purpurascenti. — In foliis putrescentibus Pini silvestris, Triglitz in Priegnitz Germaniæ.

4. *Dasyscypha fusco-sanguinea* Rehm — Syll. VIII, p. 459 — var. 5619 *aurantiaca* v. Höhnel ap. Rehm, Ann. Mycol. III (1905) p. 230. — Disco vitellino v. aurantiaco a typo dignoscenda.

Hab. in cortice Pini montanæ, Rudolfshütte in Stubachthal, Salzburg (v. HÖHNEL).

5. *Dasyscypha Körberii* (Peyl) Sacc. et Trav., *Peziza Körberii* Peyl, Beschr. einig. neuer Pilze in Lotos VIII (1858) p. 31, t. I, f. 20. — Ascomatibus sparsis, in stipitem brevissimum tenuatis, minutissimis, madore tantum apertis, trochiformi-globosis, extus setulis rigidulis, nitide albis, crystallinis, apice rotundatis dense vestitis; disco concavo albo; ascis tereti-clavatis, paraphysatis, in stipitem

longiusculum tenuatis, apice rotundatis, octosporis; sporidiis oblique monostichis, ellipsoideis, hyalinis.

Hab. in foliis *Fimbristylis* gracilis in calidariis in Bohemia. — *Affinis Dasyseypha niveæ.*

6. **Dasyseypha subbadiella** Rehm, Ann. Mycol. V (1907) p. 534. — 5620
Ascomatibus gregariis, sessilibus, subobconicis, clausis, demum patellaribus, badio-hirtellis, 0,15 mm., excipulo parenchymatico fusco, pilis simplicibus, rectis, obtusis, glabris, septatis, fuscis, ad apicem dilutioribus, 120 \times 5-6 obsesso; ascis clavatis, apice rotundatis, 35-40 \times 6, octosporis, jodo tinctis; sporidiis fusiformibus, rectis v. curvatalis, 1-cellularibus, utrinque 1-guttulatis, hyalinis, 10 \times 2, distichis; paraphysibus filiformibus 2 μ . cr.

Hab. ad folia sicca putrescentia *Caricis* ampullacea, Sayser Alpe, Graubünden, Helvetia (Dr. VOLKART). — Vix visibilis; a *Lachno badiello* imprimis paraphysium forma diversa.

7. **Dasyseypha perplexa** Boud., Icon. Mycol. t. III, tab. 542 (1907), 5621
Hist. et Classif. Discomyc. Europe (1907) p. 120. — Minuta, 0,60-1 mm. lata, alba, hymenio pallide lutescente; ascis clavatis, minutis, foramine immarginato, 40-45 \times 6-7; paraphysibus elongatis, fusideo-acutis, ad basim septatis, albis, intus minute granulosis, 70-75 \times 4; sporidiis oblongo-fusoideis, intus non aut rarius granulosis, 10-12 \times 2-3.

Hab. ad folia emortua *Caricis* maximæ, Montmorency, Gallia. — *Habitu* *Erinellæ juncicolæ* sed sporidiis non filiformibus distincta.

8. **Dasyseypha caricicola** (Lasch) Sacc. et Trott., *Peziza caricicola* 5622
Lasch in Klotzsch Herb. viv. Mycol. n. 1581. — Breviter stipitata, hemisphaerica, albo-villosa, disco aureo.

Hab. in *Caricis* sp. in Germania. — An *Dasyseypha Caricis*?

9. **Dasyseypha Typhæ** Jaap, Verh. bot. Ver. Prov. Brandenb., LII 5623
(1910) p. 115. — (Nomen nudum).

Hab. in foliis vetustis putrescentibus *Typhæ angustifoliae*, prope Triglitz in Brandenburgia.

10. **Dasyseypha Winteriana** Rehm, Discom. in Krypt. Fl. III, p. 840 5624
et 826 (icon.). — Ascomatibus gregariis, sessilibus, calyciformibus, primo clausis, ovoideis vel in stipitem brevem tenuatis, dein circulariter hiascentibus et discum concavum, hyalinum ostendentibus, diaphanis, albo-flavidulis, extus flavidо-rubellis et pilis laxiusculis, curvulis, septatis, hyalinis, brevibus, 3 μ . cr. conspersis, siccis contortis v. flexis, 250-300 μ . diam., ceraceis; ascis clavatis late

sessilibus, apice obtusule acutatis, 40-50 \times 7-8, octosporis; sporidiis fusoideis, subrectis, 1-cellularibus, utrinque 1-guttulatis, demum diblastis, 12-15 \times 2, distichis; paraphysibus filiformibus, 1,5 μ . cr.

Hab. in petiolaris putrescentibus *Asplenii Filicis-feminæ* pr. Königstein a. E. Saxonie (KRIEGER). — *Var. tetraspora* Rehm, l. c. p. 841. — *Ascis tetrasporis*; sporidiis 15-18 \times 2-3,5, continuis. — In eadem matrice, Rigi Helvetiæ (WINTER).

11. *Dasyscypha flavidula* Rehm, Ann. Mycol. VII (1909) p. 542. — 5625

Ascomatibus in rimis stipitis arcte congregatis, sessilibus, tenuissime stipitatis, cyathoideis, pseudoparenchymatic contextis, pilis sparsis, septatis, subcurvatis, obtusis, scabris, hyalinis v. dilute flavidulis, c. 50 \times 4 obsessis, c. 250 μ . diam., stip. 100 μ . lato, 0,3 mm. alto, albo-flavidulis, siccis aureis; ascis clavatis, apice rotundatis, 40-45 \times 4-5, octosporis, jodo immutatis; sporidiis oblongis, utrinque obtusis, rectis, 1-cellularibus, hyalinis, 6-7 \times 1,5-2, 1-2-stichis; paraphysibus filiformibus, 2,5 μ . cr., hyalinis.

Hab. ad stipites *Filicis?* Sao Leopoldo Rio Grande do Sul Brasilie (THEISSEN S. J.). — *D. Pteridis* colore et structura valde distincta.

12. *Dasyscypha abscondita* Massé, Kew Bull. n. 46 (1906) pag. 46, 5626

fig. 1-6. — Ascomatibus 1,5-2 mm. alt., 1 mm. lat. gregariis, primo globosis dein cupulatis, stipitatis, extus marginaque pilosis, albidis; pilis hyalinis, septatis, clavatis, 60-80 \times 7-10; ascis cylindraceis, octosporis, 50 \times 6-7; sporidiis hyalinis, ellipsoideis, 5 \times 2; paraphysibus filiformibus.

Hab. gregaria in Horto bot. Kew Angliae (G. NICHOLSON).

13. *Dasyscypha inconspicua* P. Henn., Verh. Bot. Ver. Prov. Bran- 5627

dbg. L (1908) p. 134. — Ascomatibus foliicolis subsessilibus, minutis, subglobosis, albidis, pilis hyalinis vix septatis, 60-140 \times 4-5, erectis vestitis, disco albo, levi, c. 150 μ . diam.; ascis clavatis, obtusis, octosporis, 22-30 \times 4-4,5; paraphysibus filiformibus, hyalinis, c. 1-1,5 μ . cr.; sporidiis subdistichis, oblongis, rectis v. curvulis, obtusiusculis, hyalinis, 5-6 \times 1,5-2.

Hab. ad folia putrida prope Tamsel, Germania (VOGEL). — Ob staturam et indumentum pilorum distincta.

14. *Dasyscypha Fairmani* Rehm, Ann. Mycol. VII (1909) p. 535. — 5628

Ascomatibus gregariis, sessilibus, primitus globoso-clausis, dein ureolatis, demum explanatis, disco orbiculari, dilute carneo, 1-2 mm. diam., ceraceis, excipulo pilis longissimis, simplicibus, vario modo curvatis, obtusis, septatis, glabris, fuscidulis, versus apicem hya-

linis, perlóngis, 4 μ . cr. vestito, siccis urceolatis, disco flavidulo; ascis clavatis, apice rotundatis, 50-60 \times 7-8, J-, 8-sporis; sporidiis oblongo-cylindraceis, utrinque obtusis, unicellularibus, utroque apice parviguttulatis, hyalinis, 12-14 \times 3, distichis; paraphysibus filiformibus, 2 μ . crassis.

Hab. ad lignum putridum in silvis, Lyndonville, New York Amer. bor. (E. FAIRMAN). — *Das. albo-luteæ* proxima sed sporidiis majoribus distincta.

15. **Dasyscypha atropila** Boud., Icon. Mycol. t. III, pl. 505 (1907), 5629 Hist. et Classif. Discomyc. Europe (1907) p. 121. — Minuta 0,5-1 mm. lata et alta, pedunculata, ochracea, pilis elongatis nigris et septatis dense vestita; ascis clavatis, octosporis, 55-60 μ . long.; paraphysibus acutis, ascis paulo tantum superantibus, hyalinis, 4-5 μ . cr.; sporidiis oblongo-fusoideis, albis, intus non granulosis, 12-14 \times 2,5-3; pilis septatis, acutiusculis, sub lente composita brunneis, 140-300 \times 5-7.

Hab. in ramulis putrescentibus Aceris (?), Jura, Gallia. — A *D. relicina* Fr. ascomatibus minoribus distincte stipitatis et pilis atris distincta.

16. **Dasyscypha citricolor** (B. et Br.) Massee — Syll. XVIII, p. 85 5630 — Huc ducenda est *Trichopeziza vitricolor* (B. et Br.) Sacc. (ex errore pro *citricolor*) — Syll. VIII, p. 411.

Sect. 2. Phæosporæ.

ALEURINA Sacc. — Syll. VIII, p. 472, XVI p. 738, XVIII p. 88.

1. **Aleurina subapiculata** von Höhnel, Stzb. k. Ak. d. Wiss. Wien, 5631 CXVIII, Abt. I (1909) p. 397. — Ascomatibus gregariis, patelloideis, late adnatis, margine incurvato revoluto, 5-7 mm. latis, 400-450 μ . cr., e brunneo-olivaceo nigricantibus, extus glabris, rugulosis; excipulo grosse parenchymatico 200 μ . cr.; ascis cylindraceis, octosporis, 270 \times 12; paraphysibus filiformibus, 1,5-2 μ . cr., supra clavatis et 6-9 μ . latis, brunneolis; sporidiis monostichis, ellipsoideis, utrinque subangustatis, apice acutatis v. apiculo hyalino usque ad 2 μ . longo præditis, pallide brunneolis, biguttulatis, minute granuloso-rugulosis, 18-22 \times 8-9,5.

Hab. in latere interiore corticis putrescentis, Tjibodas in ins. Java. — *A. ochraceæ* (Mass. et Rod.) et præcipue *Aleur. apiculatae* (Cooke) affinis.

2. *Aleurina Readeri* Rehm, Ann. Mycol. VI (1908) p. 324. — Asco- 5632
 matibus sparsis vel aggregatis, primitus subturbinatis, dein patellariibus, planis, tenuissime marginatis, demum disco orbiculari convexulo, medio umbonato, 7-10 mm. diam., extus glabris, itemque stipite crasso, cylindraceo, 5-7 mm. longo, 3-4 mm. crasso, versus basim subincrassato, sordide albidulis vel albido-ochraceis, carnosis; ascis cylindraceis, apice rotundatis, haud incrassatis, 150 \times 9-10, octosporis jodo immutatis; sporidiis oblongo-ellipsoideis, 1-cellaribus, haud guttatis, primitus hyalinis, demum fuscidulis, glabris, 12-14 \times 6, monostichis; paraphysibus filiformibus, septatis, intus granulatis, hyalinis, 2 μ . crassis usque ad apicem.

Hab. ad terram?, Co. of Folett, Victoria Australiæ (F. M. READER). — *Aleurinæ substipitatae* et *A. olivacea* subaffinis.

Sect. 3. *Hyalodidymæ.* *

HELOTIELLA Sacc. — Syll. VIII p. 474, XI p. 415, XIV p. 782, XVI p. 740, XVIII p. 93.

1. *Helotiella Maireana* Rehm, Ann. Mycol. IV (1906) p. 440. — A- 5633
 scomatibus gregariis, sessilibus, subcyathoideis, primitus globoso-clausis, dein disco orbiculari plano, tenuissime marginato, 0,15-0,25 mm. lat., extus glabris, in stipitem brevissimum crassum elongatis, 0,2 mm. alt.. hyalino-citrinulis, siccis distinctius stipitatis, excipulo ceraceo pseudoparenchymatico hyalino; ascis cylindraceo-clavatis, apice rotundatis incrassatisque, 60-70 \times 5-6, octosporis, poro jodo tincto; sporidiis oblongis, utrinque subattenuato-rotundatis, medio crasse septatis, haud constrictis, utrinque juxta septum 1-guttulatis, hyalinis, 7-8 \times 2,5, oblique 1-stichis (interdum in apice asci 2-stichis); paraphysibus filiformibus, hyalinis, 3 μ . crassis.

Hab. in cupulis dejectis Quercus cocciferæ prope Olympiam Elidis Græciae (R. MARRE). — Hinc *Helotio herbarum* illinc *Phialeæ subpallidæ* et *Ph. alniellæ* affinis, sed sporidia crasse 1-septata.

2. *Helotiella Bubákii* Rehm, Ascom. exs. n. 1679, Ann. Mycol. V (1907) pag. 78. — Ascomatibus cæspitosis, plerumque 2-20 arcte congregatis, rarius solitariis, per epidermidem prorumpentibus, dein fere sessilibus, cyathoideis, primitus globoso-clausis, mox disco orbiculari tenuiter marginato explanato, demum subimmargi-

nato et complicato, dilute albido-flavidulis, siccis flavescentibus, in stipitem brevissimum elongatis, 0,2-0,5 mm. diam., excipulo pro-senchymatice contexto, hyalino; ascis clavatis, apice rotundatis et subincrassatis, 90-100 \times 8-9, jodo tinctis; sporidiis fusoideis plerumque rectis, medio septatis, utraque cellula guttis oleosis magnis 2 repleta, demum 3-septatis, hyalinis, 12-15 \times 4-5, distichis; paraphysibus filiformibus, 2 μ ., versus apicem 3 μ . cr., hyalinis.

Hab. in silvis umbrosis ad flumen Luznica in ramis emortuis *Salicis fragilis* (BUBAK). — Ob sporidia demum (genuine?) 3-septata ad *Belonium vertit.*

3. *Helotiella Rehmii* (Strasser) Sacc. et Trott., *Helotium Rehmii* Strasser, Verh. k. k. zool. bot. Gesellsch. Wien LVII (1907) p. 332, *Helotium lutescens* Rehm, Ascom. exsicc. n. 1719 b. — Ascomatibus plerumque gregariis, raro ad corticem putrem insidentibus, saepe sub cortice orientibus vel intra rimas corticales nidulantibus, primum subturbinatis et demum depresso-discoideis, tenui-ce-raceis, glabris, stipite et disco flavo-citrino, siccis flavo-auratis; disco ad marginem acie tenui flavidо-viridi, 1-2 mm. lat., stipite quandoque usque ad 1 mm. long.; ascis elongatissime clavatis, apice rotundatis, 140-160 \times 12-13; sporidiis supra distichis infra monostichis, ellipoideis vel obtuse fusoideis, hyalinis, uniseptatis, quandoque triseptatis, ad septa constrictis, plerumque 18-23 \times 6-8; paraphysibus ramosis, apice flavidis, 2 μ . cr., apice crassiusculis, 2,5-3 μ . J +.

Hab. ad cortices abietinos putres, Sonntagberg Austriæ inferioris.

4. *Helotiella discula* (Ferdinands. et Winge) Sacc. et Trott., *Helotium discula* Ferd. et Winge, Botanisk Tidsskrift XXX (1910) p. 211, fig. 1. — Ascomatibus gregariis, sessilibus, juvenilibus cupulatis, maturis discoideo-explanatis, disco subconvexo, carnosulis, ad 750 μ . diam., flavidis v. (in sicco) succineis, extus glabris; ascis cylindraceo-clavatis, sessilibus, 43-56 \times 4,75-6,50, sporidia nonnullunquam 8, saepius, — nonnullis frustratis — pauciora foventibus; sporidiis oblique monostichis, fusiformibus, utrinque acutiuscule rotundatis, primo bi-guttulatis, ad maturitatem medio 1-septatis, non constrictis, 10,5-14 \times 2,5-3,7 hyalinis; paraphysibus filiformibus, non septatis, 1 μ . circ. cr., hyalinis, superne in clavulam usque ad 5 μ . cr., substantia oleosa, flava repletam subito dilatatis, ascos parum superantibus; membrana tota ascorum nec non paraphysibus jodi ope intense cærulescentibus.

Hab. ad lignum subputridum decorticatum prope Las Trincheras Venezuela (H. LASSEN).

5. *Helotiella Werthiana* P. Henn., Deutsche Südpolar-Exped. Bd. VIII 5637 (1906) Extr. pag. 7, tab. I, fig. 7, a, e. — Ascomatibus ceraceis, sessilibus, sparsis v. gregaris, primo subgloboso-clausis, dein cupulatis, extus subviolaceo-brunneolis, marginatis, circ. 300-380 μ . diam., disco concavo v. subplano, fusco-brunneo dein pallescenti, levi; ascis cylindraceo-clavatis, obtusis, octosporis, 45-60 \times 6-10; paraphysibus filiformibus, ramosis, hyalinis, 1,5-2 μ . cr.; sporidiis fusoideis, subacutis, rectis, medio septatis, haud constrictis, hyalinis, eguttulatis, 10-12 \times 4.

Hab. in foliis Poæ Cookii, in ins. Possessionis, Crozet-Gruppe (E. WERTH).

6. *Helotiella Drygalskiana* P. Henn., Deutsche Südpolar-Exped. Bd. 5638 VIII (1906) Extr. p. 6, tab. I, fig. 6, a, e. — Ascomatibus ceraeis, sparsis v. subgregariis, sessilibus, primo subglobosis, clausis, dein cupulatis, violaceo-brunneis, subradiato-striatulis, c. 300-330 μ . diam., disco pallido, concavo; ascis cylindraceo-clavatis, obtusis, 8-sporis, c. 30-35 \times 3-4; paraphysibus lanceolatis, superantibus, acutis, c. 40 \times 4; sporidiis oblique monostichis v. subdistichis, rectis v. curvulis, ellipsoideis v. fusoideis, medio 1-septatis, hyalinis, 7-8 \times 3-3,5.

Hab. in foliis Poæ Cookii, in ins. Possessionis, Crozet-Gruppe (E. WERTH).

7. *Helotiella nerviseda* Rehm, in Strasser Verh. k. k. zool.-bot. Gesellsch. Wien LVII (1907) p. 333. — Ascomatibus epiphyllis et plerumque ad nervos foliorum putrescentium sparse insidentibus, primum cylindraceo-clausis dein calyciformi-apertis demum tenuiter et depresso marginatis, 0,2-0,5 mm. lat., basi in pedicellum cylindraceum curvulum 1 mm. long. circ. 0,2 mm. cr. attenuatis, e pallide flavis stramineis, excipulo glabro prosenchymatico; ascis clavatis, supra rotundatis, octosporis, 100 \times 10, J+; sporidiis ellipsoideis, obtusiusculis, rectis, subinæqualibus, bilocularibus, ad septum vix constrictis, hyalinis, 15 \times 5, distichis; paraphysibus filiformibus, 2 μ . crassis, supra usque ad 4 μ ., hyalinis.

Hab. ad folia putrescentia, Sonntagberg Austriae inf.

PSOROTHECIOPSIS Rehm — Syll. XVI p. 746, XVIII p. 98.

1. *Psorotheciopsis decipiens* Rehm — Syll. XVI, p. 746 — var. *bispora* Rehm, Hedwigia XLVII (1905) p. 11, fig. 9. — Ascis pi-

riformibus, sessilibus, versus apicem elongatis, 80 ~ 40, bisporis; sporidiis demum 50-60 ~ 25-30.

Hab. ad folium Guatteriæ australis, Blumenau Amer. austr. (ULE).

NIPTERA Fr. em. Sacc. — Syll. VIII p. 480, X p. 24, XI p. 416, XIV p. 784, XVI p. 471, XVIII p. 94.

1. **Niptera Lychnidis** (Fuck.) Lind, Vidensk.-Selskab. Skrif. Math. 5641 Naturw. Kl., Christiania (1909) n. 9, Extr. pag. 13, *Micropeziza Lychnidis* Fuckel, Oudemans, Fl. mycol. Nowaja Semlja (1885) tab. II, fig. 10. — Ascis ellipsoideis utrinque attenuatis, breve stipitatis, tenue tunicatis, curvulis, 8-sporis, 60 ~ 12; paraphysibus numerosis; sporidiis ellipsoideis, falcatis, hyalinis, inæqualiter bipartitis, 18-22 ~ 4-5.

Hab. in foliis emortuis Melandrii apetali fm. arcticæ, King William Land Americae Arcticæ.

2. **Niptera Gaduæ** P. Henn., Hedwigia XLVII (1908) pag. 270. — 5642 Ascomatibus sparsis superficialibus, sessilibus, cupulato-patellatis, ceraceis, marginatis, ca. 300 μ . diam., extus subpallidis, disco incarnatis; ascis subclavatis apice rotundato-obtusis, 8-sporis, 40-50 ~ 3,5-5, paraphysibus filiformibus hyalinis, 1-1,5 μ . crassis, apice clavatis, c. 2 μ . incrassatis; sporidiis oblique monostichis v. subdistichis, ellipsoideis, 1-septatis, haud constrictis, 6-11 ~ 2,5 ~ 3,

Hab. in ramulis Gaduæ? sp. in societate *Balansiae regularis* Möll., Amazonas, Juruá-Miry.

3. **Niptera chilensis** Speg., Fungi Chilenses (1910) p. 126, cum icon. 5643 — Ascomatibus hinc inde pauci-gregariis constipatis, udis patellatis, siccis contracto-difformibus, minutis, extus fusco-ferrugineis, coriacellis, intus melleis, subceraceis, 0,5-1,5 mm. diam.; ascis clavulatis sursum subacutiusculis, deorsum longiusculle attenuato-pedicellatis, 90-100, p. sp. 60-70 ~ 7-9, paraphysibus filiformibus vix longioribus apice 2-3 μ . subincrassatulis et acutiusculis obvallatis; sporidiis monostichis e fusoideo subbotuliformibus medio 1-septatis, non constrictis, hyalinis, parvis, 11-14 ~ 3.

Hab. in ramis erosis plantæ ignotæ (? *Etoxicij*), Cerro Caracol de Concepcion, Chile Amer. austr.

4. **Niptera Müller-Argoviensis** Rehm, Ann. Mycol. IV (1906) p. 340 5644 et VI (1908) p. 324. — Ascomatibus gregariis, in maculis dilute denigratis sessilibus, hypophyllis, primitus globoso-clausis, dein disco urceolato hyalino, fimbriato-marginato, extus fusco-nigris, a-

sperellis, siccis imprimis corrugatis et involutis, excipulo parenchymatico e cellulis fuscis subrotundis usque ad 15 μ . contexto, versus marginem seriebus hypharum simplicibus, interdum subramosis, septatis 4-5 μ . crassis, cellula apicali obtusa clavata 10-20 \times 5-8 coronatis, subfuscis, ceraceis, 300-350 μ . diam.; ascis clavatis, apice rotundatis, sessilibus, 35-40 \times 5-7, octosporis, poro jodo tineto; sporidiis cylindraceis, rectis, medio septatis, haud constrictis, hyalinis, 10 \times 1,5, distichis; paraphysibus filiformibus, septatis, 1,5 μ ., versus apicem 2,5 μ . crassis, hyalinis.

Hab. ad folia *Quercus Ilicis*, Cavalaire Galliae australis (MÜLLER-ARGOV. in Herb. BARBEY-BOISSIER).

5. *Niptera ramincola* Rehm, in Feltg. Vorst. Pilz.-Fl. Luxemb. IV 5645 (1905) p. 27, *N. ramealis* Karst. sec. Rehm olim. — A *N. ramealis* sec. Feltgen, loc. cit. differt sporidiis utrinque obtusis, 9-15 \times 2-3.

Hab. in ligno fagineo, in ramis *Daphnes Mezerei* et *Symporicarpi*, Luxemburgia.

6. *Niptera caricicola* Speg., Myc. Arg. IV in An. Mus. Buenos Aires 5646 (1909) pag. 449. — Pusilla, superficialis, laxe gregaria, atra, glabra, amphigena, latiuscule matrici adnata, plano-concaviuscula, 200-350 μ . diam., margine integra, contextu fulvello indistincto; ascis subfusoideis utrinque leniter tenuatis, apice subrotundatis, 80 \times 10, crassiuscule breviter pedicellatis, octosporis, obturaculo jodi ope carulescente; paraphysibus filiformibus sursum non incrassatis; sporidiis elongato-ellipsoideis, oblique distichis, utrinque acutiusculis, 14-15 \times 3,5-4, rectis, primo continuis dein diblastis, non constrictis, hyalinis.

Hab. ad folia arida *Caricis* cujusdam in herbosis secus Rio Carrenleofú, Patagonia, Argentina.

LINHARTIA Sacc. et Syd. — Syll. XVI p. 744, XVIII p. 95.

1. *Linhartia Höhnelli* Rehm, Hedwigia XLVII (1905) p. 11. — Ascomatibus in medio macularum epiphyllarum dispersarum, orbicularium, 1 mm. lat., e cellulis prosenchymaticis centrifugis c. 10 \times 4-5, dilute flavidulis contextarum, membranacearum, 2-4 sessilibus, primus globoso-clausis, mox apertis, patellaribus, orbicularibus, disco hyalino, margine tenuissimo fuscidulo, e cellulis elongatis fuscis composito cincto, 220-250 μ . diam., siccis globulosis, fuscis; ascis clavatis, apice rotundatis, 60-90 \times 8-10, octosporis; sporidiis elongato-fusoideis, medio septatis et valde constrictis, strato mucoso

tenui obvolutis, hyalinis, 15-18 \times 3, distichis, paraphysibus filiformibus, 1,5 μ . cr., hyalinis; J-.

Hab. ad folia Psidii, Petropolis prope Rio de Janeiro Amer. austr. (v. HÖHNEL).

Sect. 4. Hyalophragmiæ.

PUTTEMANSIA P. Henn. — Syll. XVIII p. 98.

1. **Puttemansiæ lanosa** P. Henn. — Syll. XVIII p. 98 — var. *uni-caudata* Rick, Broteria V (1906) p. 32. — A typo differt cellula caudiformi unica, sporidiis paullo minoribus (sed revera etiam in typo sporidia sunt tantum unicaudata).

Hab. in foliis Lauraceæ cujusdam, Rio Grande do Sul Brasilicæ.

BELONIELLA Sacc., Conspl. Discom in Bot. Centralbl. XVIII (1884) pag. 219, em. Rehm, Disc. pag. 638 — Syll. XIV p. 786, XVI p. 1149.

1. **Beloniella Galii-veri** (Karst.) Rehm — Syll. VIII, p. 356 [*Pyrenopeziza*] — var. *subalpina* Rehm, Ann. Myc. III (1905) p. 411 et Ascom. exsicc. fasc. 35, n. 1607. — Ascomatibus 1,5 mm. diam., in sicco epidermide nigrescente caulis obtectis, udis globose prominentibus, disco pallide roseolo, primitus orbiculari, dein sæpe oblongo, margine albidulo fimbriatulo cincto.

Hab. in caulibus Galii sp. supra Feilenbach Alpium Bavariæ (Doct. REHM).

2. **Beloniella Brunellæ** Lind., Ann. Mycol. V (1907) p. 274 et Rehm 5650 Ascom. Exs. n. 1728, Ann. Myc. V (1907) p. 466. — Subiculo per radices et stipites usque in folia viva serpente, atro, in foliorum imprimis superiore pagina fibrillose orbiculariter v. stellatim 1 cm. lat. expanso; ascomatibus sæpe congregatis, innatis, dein prorumpentibus, primitus globoso-clausis, demum disco explanato, cinereo-albo, crasse marginato, 0,5 mm. lat., excipulo crassō, scabro, extus parenchymatico fusco, intus hyalino; ascis clavatis, apice rotundatis, 60-70 \times 10-12, octosporis; J+; sporidiis subellipsoideis, utrinque obtusis, primitus 1-cellularibus, guttis oleosis 2 magnis repletis, demum 2-(4) cellularibus, hyalinis, 15-17 \times 4,5-5, distichis; paraphysibus filiformibus 1,5 μ ., versus apicem 3 μ . cr., hyalinis.

Hab. ad parasiticoe *Brunellam vulgarem*, Silkeborg Jutland, Dania.

3. *Beloniella biseptata* Ferdinand. et Winge, Bot. Tidsskr. XXVIII 5651 (1907) p. 252, cum icon. — Ascomatibus epiphyllois, initio immersis, globosis, plus minusve superficialibus, cupulatis, subplanis, 125-185 μ . diam., disco atro-cinereo; ascis clavatis, deorsum leniter attenuatis, sessilibus, poro J +, 50-70 \times 8,5-10; sporidiis 4- v. 8-nis, cylindraceis v. cylindraceo-ovoideis, utrinque rotundatis, biseptatis, 8,5-12 \times 2,5-4, hyalinis; paraphysibus simplicibus v. sparsim ramosis, ascis æquantibus, superne clavatis.

Hab. ad folia sicca *Veronicae agrestis*, prope Borris Jutlandie.

4. *Beloniella Bromeliacearum* Rick, Broteria v. V (1906) p. 36. — 5652 Ascomatibus erumpentibus, gregariis, 1 mm. latis, primitus globosis et hyphis laxis hyalinis tectis, denique disco rubro-cooperatis, margine fimbriato, extus luteo-rubris; hypothecio crasso, ceraceo; ascis 50-60 \times 12, sessilibus; sporidiis ellipsoideis, hyalinis, bicellularibus, in septo non constrictis, 7-12 \times 6, biguttulatis, uni- v. bireticularibus; paraphysibus parum evolutis.

Hab. in foliis putridis *Bromeliaceæ epiphytae*, Rio Grande do Sul Brasiliæ.

BELONIDIUM Mont. et Dur. — Syll. VIII p. 496, X p. 27, XI p. 417, XIV p. 786, XVI p. 749, XVIII p. 103.

1. *Belonidium bilimbioides* Rehm, Ann. Mycol. V (1907) p. 533. — 5653 Ascomatibus in maculis epiphyllois parvulis, albido-dispersis, sessilibus, primitus globuloso-clausis, dein urceolatis, tenuissime marginatis, disco hyalino, excipulo parenchymatico, flavidulo, c. 300 μ . diam., siccis convoluto-clausis, subfuscis; ascis fusiformibus, crasse tunicatis, sessilibus, 4-8-sporis, 150-170 \times 25-30, jodo immutatis; sporidiis fusiformibus, utrinque subacutatis, rectis vel subcurvatulis, transverse 23-25-septatis, hyalinis, 90 \times 12-14, parallele positis; paraphysibus ramosis, tenerrimis, hyalinis, 1 μ . cr.; hypothecio hyalino.

Hab. ad folium Myrtaceæ, Sao Paulo, Brasiliæ (USTERI). — Habitus lichenoideus sed gonidia desunt; forte *Lecanice fugienti affinis* species.

2. *Belonidium heterospermum* (Schulzer) Sacc. et Trott., *Peziza heterosperma* Schulz. (Esterr. bot. Zeitschr. (1878) p. 320. — Ascomatibus totis albis, sessilibus, initio globulosis, dein scutellatis, regularibus,

150-300 μ . diam., margine elevato integro; excipuli contextu molliusculo, ex hyphis tenuibus divergentibus confiato; ascis clavatis, octosporis, paraphysibus paucis, interdum apice capitulatis; sporidiis subdistichis, 3-septatis, hyalinis, oblongo-ovoideis, curvulis, 6-7 \times 2,5, basi in appendicem cylindraceam paullo angustiorem septatam 10 μ . longam desinentibus.

Hab. in ligno *Fraxini* putrescente in silvis prope Vinkovce Hungarie. — Ascomata mycelio brunneo *Helminthosporii gonio-trichi* Corda (conid. 32-34 \times 10-12, brunneis, 6-7-septatis) insident, teste auctore. Cl. Rehm ad *Belon. Aureliam* refert, sed e descriptione satis recedit.

3. **Belonidium javense** v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, 5655 Abt. I (1909) p. 382. — Ascomatibus superficialibus, sparsis, late adnatis, margine incurvato, leniter revoluto, obscure brunneo, 0,7-1,5 mm. latis, 210 μ . cr., subpatellaribus, irregulariter rotundatis, extus levibus nigro-brunneis, disco udo albido-cyaneo, sicco sordide flavidio-albo; ascis cylindraceis, supra acutatis, octosporis, 72-75 \times 8; paraphysibus filiformibus simplicibus, 2-2,5 μ . cr.; sporidiis hyalinis, cylindraceis, rectis v. curvulis, utrinque angustatis, obtusulis, plerumque 5-6-septatis, 21-32 \times 3, plerumque 25-30 \times 3, distichis v. tristichis; contextu parenchymatico, hypothecio 120 μ . cr., intus hyalino extus obscure brunneo. J+.

Hab. in ligno putri, Tjibodas in ins. Java.

4. **Belonidium succineum** Rehm, Ann. Mycol. VII (1909) p. 540. — 5656 Ascomatibus dispersis hypophyllis, in macula exarida albida 1 cm. lat. sessilibus, primitus clausis, dein disco patellari, orbiculari, deum convexo, tenuissime marginato, 0,2-0,3 mm. diam., succineis, ceraceis, siccis concaviusculis; ascis clavatis, apice rotundatis, 50 \times 12, 8-sporis, jodo immutatis; sporidiis fusiformibus, obtusis, rectis, medio 1- dein 3-septatis, haud constrictis, hyalinis, 15-20 \times 5, distichis; paraphysibus filiformibus, 1,5 μ . cr., ramosis, hyalinis; excipulo parenchymatico, ex cellulis parvulis contexto, flavidulo, non gelatinoso.

Hab. ad folium coriaceum, Pará Brasiliæ (BAKER). — Si ascomata ex folii parenchymate exirent, quod incertum est, ad *Façream* potius spectare videretur.

5. **Belonidium intermedium** Rehm, Ann. Mycol. VI (1908) p. 315. — 5657 Ascomatibus gregariis, sessilibus, primitus clausis, dein patellariibus, disco orbiculari plano, flavo, tenuiter marginato, excipulo parenchymatico fusco, levibus, 0,2-0,3 mm. siccis, nigrescentibus; ascis

clavatis, versus apicem angustatis, 80 \times 12, octosporis, jodo immutatis; sporidiis fusoideo-elongatis, utrinque subobtusis, plerumque rectis, 3-septatis, hyalinis, 24-30 \times 5-5,5, ad septa paullulum constrictis, distichis; paraphysibus filiformibus 2 μ ., versus apicem 3,5 μ . crassis, hyalinis.

Hab. ad culmos putrescentes Calamagrostidis canadensis, Madison Wisc. Amer. bor. (A. B. STOUT). — *Bel. lacustri* et *Bel. subnivali* proximum, sed satis diversum.

6. **Belonidium Glyceriae** Peck New York St. Mus. Bull. 139 (1909) 5658 p. 19. — Ascomatibus 1-1,5 mm. latis, gregariis, sessilibus, planis v. convexis, extus glabris seu papillatis, flavidis; ascis subclavatis v. subfusiformibus, obtusis, 120-130 \times 14-18; sporidiis oblongis v. subcylindraceis, rectis v. leviter curvis, 3-septatis, saepe 4-nucleatis, confertis v. distichis, 35-40 \times 4-5; paraphysibus filiformibus.

Hab. in culmis emortuis Glyceriae nervatae, Lyndonville Orleans co. Amer. bor.

7. **Belonidium collemoides** Rehm, Ann. Mycol. V (1907) p. 533. — 5659 Ascomatibus sparsis, sessilibus, primitus globoso-clausis, dein patellaribus, disco orbiculari, tenuiter marginato, excipulo glabro, subtus coarctato, vitellinis, ceraceis, 0,5-1,5 mm. diam.; ascis subcylindraceis, apice rotundatis, 50-55 \times 5-8, octosporis, jodo immutatis; sporidiis fusoideis, utrinque acutatis, rectis, 2(-4)-cellularibus, hyalinis, 7-9 \times 2-2,5, 1-(interdum apice 2-)stichis; paraphysibus filiformibus, septatis, hyalinis, 2,5 μ ., versus apicem obtusum 4 μ . cr.; hypothecio hyalino, crasso.

Hab. in Jungermanniæ specie Acaciam arabicam incolente, Sao Francisco, Brasiliæ (ULE). — Habitus fere *Collematis*.

8. **Belonidium guttula** Rick, Broteria v. V (1906) p. 36. — Ascomata 5660 tibus 300 μ . latis, subturbanatis, hyalinis, crystallinis, ceraceis, molibus, glabris; ascis 35-50 \times 12, sessilibus; sporidiis 35-50 \times 3-5, multiseptatis, fusiformibus, hyalinis; paraphysibus hyalinis, versus apicem paulatim clavatis, clava in medio angustata.

Hab. in mycelio fusco perisporiaceo, ramos bambinos occupante, Rio Grande do Sul, Brasiliæ.

9. **Belonidium belonæum** (Nyl.) Sacc. et **Belonidium abscedens** (Nyl.) 5661 Sacc. — Ita scribenda, nec *Bel. beloneum* (Cr.) et *Bel. abscedens* (Cr.) ut in Sylloge VIII, pag. 498, nam ambæ species tribuendæ sunt cl. Nylanderæ qui in Flora 1864 p. 521 primo descriptis ditque dimensiones sporidiorum, nempe: *B. belonei* sporidia 60-90 \times 3; *B. abscedentis* sp. 22-25 \times 10-11.

BELONIUM Sacc. — Syll. VIII p. 492, X p. 26, XI p. 417, XIV p. 785, XVI p. 1149, XVIII p. 107.

1. **Belonium valdivianum** Speg., Fungi Chilenses (1910) pag. 127. — 5662

Eubelonium; ascomatibus sparsis v. laxe gregariis, parvis, sessilibus, extus atris, 0,5-2 mm. diam., margine acuto glabro elevatulo, disco planiusculo subcarneo, totis coriacello-subcarnosulis; ascis clavulatis, sublongiuscule pedicellatis, 80-90 \approx 9-10, octosporis; paraphysibus filiformibus sursum vix subincrassatulis obvallatis; sporidiis e naviculari subfusoideis, utrinque acutiusculis, mediocribus, hyalinis, primo continuis pluriguttulatis, dein triseptatis, ad septum medium non v. vix constrictulis, 18-20 \approx 3-5.

Hab. ad ramos emortuos dejectos Perseæ Lingue prope Ciudad de Valdivia Chile Amer. austr.

2. **Belonium chilense** Speg., Fungi Chilenses (1910) p. 127, cum ic. 5663

— Ascomatibus sparsis v. laxe gregariis, parvis, sessilibus, planiusculis, extus atris. margine elevato repandulo pallidiore pruinuloso, disco e glauco cinereo, totis coriacello-subcarnosulis, 0,8-1 mm. diam.; ascis subcylindraceis modice cuneato-pedicellatis, 80 \approx 8, octosporis, paraphysibus 1,5-2 μ . cr. circumdatis; sporidiis subclavulato-bacillaribus, leniter curvulis, 5-septatis, hyalinis, mediocribus, 30 \approx 2-2,5.

Hab. in ramis emortuis Muehlenbeckiæ chilensis, Cerro Caracol de Concepcion Chile Amer. austr.

3. **Belonium spermatoideum** Strasser, Verh. k. k. zool.-bot. Gesellsch. 5664

Wien Bd. LVII (1907) p. 330. — Ascomatibus sparsis v. quandoque subgregariis, primum breviter crasseque stipitatis, globoso-clausis v. depresso, subdiscoideis demumque tenuiter depresso marginatis et discum convexum ostendentibus, udis flavidio-albis, ad marginem præcipue subpellucidis, glabris, 1-2 mm. diam., tenuiceraceis, siccis flavo-rubidis; ascis subcylindraceis supra leniter expansis, 60-80 \approx 5-6, octosporis; sporidiis distichis, obtuse fusoideis, hyalinis, saepe curvis, multis germinantibus, bilocularibus v. non-nullis indistincte quadrilocularibus, bi- v. quadriguttulatis, 12-14 \approx 2-3, saepe sporulis ovoideis spermatoideis 2-3 μ . cr. numerosis immixtis; paraphysibus filiformibus; excipulo prosenchymatico flavidio; J -.

Hab. in fragmentis ligneis fagineis, Sonntagberg Austriae inf. — *B. immarginata* Karst. affine.

4. **Belonium rubrum** Kirschst., Verh. Bot. Ver. Brandenb. XLVIII 5665

(1906) p. 41. — Ascomatibus minutis, 200 μ . c. diam., depresso,

rubro-brunneis, solitariis, molle ceraceis; excipulo prosenchymerico rubro-brunneo, cellulis marginalibus filiformibus praedito; ascis clavatis, basi breviter pedicellatis, 50-70 \approx 8-9, supra obtuse conoideis, octosporis; sporidiis pluries seriatis, cylindraceis, demum multiseptatis, hyalinis, quandoque curvulis, 20-24 \approx 2; paraphysibus filiformibus, supra 2-3 μ . cr.

Hab. in squamis pineis putrescentibus, in silvis prope Rathenow Germaniae. — A *B. pineti* (Batsch.) magnitudine, colore etc. bene distincta species.

5. **Belonium Junci** Jaap, Abh. Bot. Ver. Brandenb. IL (1907) 5666 p. 11. — Ascomatibus gregariis in maculis pallescentibus saepe insidentibus, primum globoso-clausis, subimmersis, dein apertis, sessilibus, margine dentatis, disco flavidio-albo, extus flavo-brunneis et nigro-brunneo maculatis, subrugulosis, udis pallidioribus, siccis obscure brunneis et margine revoluto praeditis, tenui ceraceis, 150-250 μ . diam.; ascis fusoideo-clavatis, supra acutato-obtusis incrassatis, 28-36 \approx 4-5, tetrasporis, J+; sporidiis cylindraceo-fusoideis v. subglobosis, rotundatis, rectis v. curvulis, hyalinis, unicellularibus et pluriguttulatis, demum bilocularibus, 10-18 \approx 1,5-2, distichis; paraphysibus filiformibus, hyalinis.

Hab. in foliis vetustis putrescentibus *Junci acutiflori* pr. Triglitz in Brandenburgia.

6. **Belonium coroniforme** Rehm, Ann. Mycol. V (1907) pag. 534. — 5667 Ascomatibus in apice cæspitis *Orthotrichi* 4-6 arcte confertis, in mycelio crasso hypharum hyalinarum sessilibus, patellaribus, tenuiter marginatis, roseolis, glabris c. 300 μ . alt., 350 μ . lat., excipulo pseudo-prosenchymerico, flavidulo; ascis clavatis, apice rotundatis, 100-120 \approx 10, octosporis, jodo immutatis; sporidiis elongato-fusiformibus, utrinque subobtusis, rectis, transverse 3-7-9-septatis, ad septa haud constrictis, hyalinis, 2-3-stichis, 25-30 \approx 4,5; paraphysibus longissimis, filiformibus, septatis, hyalinis, 2 μ . cr.

Hab. in *Orthotricho* prope balneum Gastein Styriæ (Dr. C. LAUBINGER).

7. **Belonium sulphureo-testaceum** v. Höhn., Ann. Myc. v. III (1905) 5668 p. 553, cum icon. — Ascomatibus sparsis, plerumque minutis, 0,5 mm. cr., tenui-carnosulis, primum flavo-sulphureis, viridulo tinctis, depresso discoideis, basi parum angustatis, siccis margine incurvatis, e rubro-brunneis fere lateritiis; hypothecio plectenchymatico fibroso-celluloso; ascis tenuiter tunicatis, fusoideo-clavatis, octosporis, 80 \approx 10-11; paraphysibus filiformibus, 1 μ . cr., apice crassi-

sculis (2 μ .) ibique sæpe curvulis; sporidiis distichis, hyalinis, elipsoideo-elongatis, utrinque rotundatis, plerumque rectis raro curvulis, plerumque quadrilocularibus, ad septa constrictulis, eguttulatis, 14-20 \times 3-5,5, plerumque 16-18 \times 4-5; J +.

Hab. ad terram prope Allentsteig Austriae inf.

8. **Belonium albido-roseum** (Rehm) Rehm, in Jaap Zur Fl. v. Glücksburg, Schr. Naturw. Ver. f. Schlesw.-Holst. Bd. XIV, Heft 2, p. 300. — Ita vocanda *Pezizella albido-rosea* Rehm, Disc. p. 682 — Syll. XI, p. 405.
9. **Belonium obtectum** Rehm, Est. Bot. Ztschr. LVI (1906) p. 346. 5670 (Nomen nudum).

Hab. in Rhododendro ferrugineo, Alpeiner-Alpe Stubai Austria.

LASIOBELONIUM Sacc. — Syll. VIII p. 502, XIV p. 789, XVIII p. 106.

1. **Lasiobelonium lachnoides** Rehm, Contr. mycol. Hung. (Növ. Közl. 1905 p. 6). — Ascomatibus gregariis, sessilibus, primitus globoso-clausis, brevissime cyathideo-stipitatis, dein disco urceolato, deum irregulariter explanato, albidulo, excipulo imprimis versus marginem pilis creberrimis rectis, obtusis, septatis, scabriusculis, dilute flavidulis, ad apicem fere hyalinis, 100-150 \times 4, adpressis obpresso, ceterum pseudoprosenchymerico, 0,5-1,5 mm. lat., 1 mm. alt., ceraceis; ascis cylindraceis ad apicem rotundatis, 90-100 \times 7-8, octosporis; sporidiis cylindraceis, utrinque subobtusis, rarissime inferius acutatis, rectis, 3-septatis, hyalinis, 18-24 \times 3, distichis; paraphysibus filiformibus, sæpe versus apicem acutatis, hyalinis, septatis, 2 μ . cr.; poro ascorum jodii ope cæruleo-tincto.

Hab. in ligno decorticato Carpinii Betuli et Alni glutinosæ, Berencsfalu, prope Selmecbanya Hungariae (KMET). — *Lachnellæ* extus similis, sporidiis plane divergens species, proxima *Lasiobelonio subflavido* Ellis et Ev., pilis autem alienis diversa, nec non paraphysibus ad formam *Lachni* plus minusve lanceolato-acutatis.

2. **Lasiobelonium globulare** v. Höhn., Stzb. k. Ak. d. Wiss. Wien 5672 CXVIII, Abt. I (1909) pag. 387. — Ascomatibus gregariis, basi angustata insidentibus, primum globoso-clausis, dein supra rotundato-apertis, subscutellatis, disco parvo ochraceo-aurantiaci, 0,5 mm. circ. diam. depresso, extus et ad marginem revolutum albis, dense albo-pilosus; ascis sessilibus, clavatis, supra rotundato-obtu-

sis et vix conoideis, octosporis, 100-110 \times 13-14; paraphysibus septatis, filiformibus, acutis, 2 μ . cr.; sporidiis hyalinis, distichis v. tristichis, fusoideis, rectis, utrinque acutis, 5-8-septatis, 40-60 \times 5,5-5. J +.

Hab. in vaginis putrescentibus *Bambusæ* in horto bot. Buitenzorg Java.

3. *Lasiobelonium aquilinellum* v. Höhnel, Ergebni. Bot. Exp. Südbras. 5673 1901, Denk. k. Ak. d. Wiss. Wien Bd. LXXXIII (1907) Extr. p. 32. — Ascomatibus gregaris, sessilibus, 200-350 μ . diam., obconoideis, pilosulis, basi in pedicellum 100-120 μ . long., 65-70 μ . cr. attenuatis, pallide griseo-brunneolis v. sordide flavidis, disco pallido; contextu prosenchymatico; ascis cylindraceo-clavatis supra conoideo-acutatis, obtusiusculis, 140-150 \times 16-18, basi in pedicellum tenuem 40 μ . long. angustatis, octosporis; sporidiis parallele dispositis, hyalinis, quadrilocularibus, cylindraceis, utrinque attenuato-obtusis, 52-56 \times 2-3,5; paraphysibus tenuiter filiformibus, supra non incrassatis. J +.

Hab. in pagina inf. frondium brunnescens Pteridii aquilini, M. Jaraguá prope Taipas Sao Paulo Brasilia.

STROSSMAYERA Schulz. (Est. bot. Zeitschr. (1881) p. 314 (Etym. in honorem Episcopi J. G. STROSSMAYER, Botanices mæcenatis). — Ascomata sessilia, primo globosa, denique cupuliformia, mollia, glabra, in mycelio *Helminthosporii* insidentia. Ascii clavati, substipitati, octospori. Sporidia oblongo-ellipsoidea, 3-septata, hyalina, basi appendicula crassiuscula, teretiuscula, equidem septata demum secidente aucta. — Sporidiorum appendiculæ peculiari mox dignoscendum genus.

1. *Strossmayera Rackii* Schulz., l. c. cum fig. spor. — Ascomatibus 5674 minutissimis 150-300 μ . diam., albis, subregularibus, marginatis, cellulis parenchymatis hyalinis ex hyphis tenuissimis ascendentibus contextis; ascis 92 \times 11-13; paraphysibus paucis interdum subcapitellatis; sporidiis di-tristichis, 6 \times 2,5, triseptatis, non constrictis, oblongo-ellipsoideis utrinque rotundatis, hyalini, appendicula cylindracea 11 \times 2, apice rotundata, leniter curva, 3-septata, tarde secedente.

Hab. in mycelio *Helminthosporii gongrotrichi* ad ramulos *Fraxini* in silva Vidor pr. Vinkovce Hungarie.

TRICHOBELONIUM Sacc. — Syll. VIII p. 495, XVI p. 747, XVIII p. 99.

1. **Trichobelonium virgineum** Rick, Broteria V (1906) p. 224. — Subciculo albo arachnoideo; ascomatibus substipitatis, 1-2 mm. latis, extus intusque hyalino-albis, dein disco flavescente, carnosus; extus pilis vertice globosis, septatis, albis, 0,1 mm. longis, glandulosis, rigidis, dense vestitis; ascis clavatis, circ. 150 \times 12, breviter pedicellatis, apice angustatis; sporidiis filiformibus, 100 \times 2,5, octonis, hyalinis, multiseptatis; paraphysibus filiformibus, ramosis.

Hab. in Palmis putridis in Brasilia.

2. **Trichobelonium distinguendum** Syd., Myc. germ. fasc. XIV-XV n. 704 5676 (1908) et Ann. Mycol. VI (1908) p. 479. — Ascomatibus gregariis, mycelio ex hyphis brunneolis septatis ca. 5 μ . crassis composito insidentibus, tenuiter marginatis, disco plano albido-griseo vel leniter albido-cærulescente extus subhyalinis, levibus, $1\frac{1}{2}$ -2 mm. latis, ceraceis, in siccio vix vel parum involutis et sordide albidis v. albo-griseis; ascis cylindraceo-clavatis, apice obtuse attenuatis, 60-80 \times 6-8, octosporis; sporidiis distichis, subcylindraceis, obtusis, rectis vel lenissime curvulis, primo continuis et pluribus guttulis oleosis repletis, dein medio 1-septatis (an tandem pluriseptatis?), hyalinis, 18-26 \times 2 $\frac{1}{2}$ -3 $\frac{1}{2}$; paraphysibus filiformibus, hyalinis, ca. 1 $\frac{1}{2}$ μ . crassis, aecos æquantibus vel parum superantibus.

Hab. in culmis emortuis Phragmitis communis, Schmöckwitz pr. Berolinum Marchiæ Brandenb. (Sydow). — Inter *Tapesiam hydrophilam* et *Trichobelonium retincolam* species fere media.

3. **Trichobelonium albo-granulatum** Rehm, Ann. Mycol. VII (1909) 5677 p. 540. — Ascomatibus in epiphylo late albide granulato, mycelio hypharum hyalinorum arcte congregatarum, crystalla irregularia plurima obtegentium obducto sessilibus, primitus globoso-clausis, dein orbiculariter applanatis, margine tenuissimo mycelii cinctis, disco hyalino, subflavidulo, excipulo parenchymatico, hyalino, 0,5-1,5 mm. diam.; ascis clavatis, crassis, apice rotundatis, 80-90 \times 20, octosporis; sporidiis ellipsoideis, utrinque obtusis, rectis v. subcurvatis, transverse 5-7-septatis, cellula tertia latiore, 25 \times 7-8 distichis; paraphysibus filiformibus, 1 μ . cr. hyalinis conglutinatis.

Hab. ad folium coriaceum, São Leopoldo, Rio Grande do Sul Brasiliae (THEISSEN S. J.). — Magnitudine ascomatum et conformatioe sporidiorum valde distincta species.

VELUTARIA Fuck. — Syll. VIII p. 488, XIV p. 785.

1. **Velutaria Polytrichi** Rehm, Hedwigia XXVIII (1889) p. 348. — 5678

Ascomatibus sessilibus, primitus globosis, dein urceolatis, crasse marginatis, demum explanatis et irregulariter tenuiter marginatis, fu-sco-nigris, disco pallidiore, crasse parenchymatico flavo-contextis, glabris, c. 0,2-0,4 mm. diam.; ascis clavatis, apice subrotundatis et incrassatis, 36 \times 6-8, ? octosporis; sporidiis fusiformi-clavatis, obtusis, rectis, 1-cellularibus, hyalinis, 7-8 \times 3, distichis; paraphysibus filiformibus, teneris, superne dichotomis, apice rotundatis, dilatatis 5 μ . cr., flavis. J -.

Hab. in pedunculis fructiferis emortuis *Polytrichi juniperini*, prope Radnitz Moraviae (v. NISSL). — Ob immaturitatem incertum est an vere ad *Velutariam* pertineat.

Sect. 5. Hyalodictyæ.

DICTYOMOLLISIA Rehm, Ann. Mycol. VII (1909) p. 540 (Etym. *dictyon* rete et *Mollisia*). — A gen. *Mollisia* ascis oblongo-globosis, sporidiis transverse et perpendiculariter septatis, inde parenchymaticis diversum genus. — Primum genus dictyosporum inter Pezizaceas!

1. **Dictyomollisia albido-granulata** Rehm, loc. cit. — Ascomatibus hy- 5679 pophyllis, in maculis vix flavidulis, haud marginatis plerumque solitariis, rarius binis sessilibus, primitus globoso-clausis, dein urceolatis, demum disco orbiculari dilute aureo, crasse granulato-marginato, tandem interdum circulariter convolutis, extus albis, granulatis, excipulo crasso parenchymatico e cellulis sexangularibus hyalinis, 20 μ . latis formato, 0,5-1,5 mm. diam., siccis involutis; ascis oblongo-globosis, haud stipitatis, 45-48 \times 25-30, octosporis, jodo immutatis; sporidiis ovoideo-oblongatis, utrinque rotundatis, transverse 5-7-, perpendiculariter 1-2-septatis, hyalinis, medio subconstrictis, 20-22 \times 8-10; paraphysibus tenerrimis, ascos ambientibus.

Hab. ad folia Lauraceæ, Sao Leopoldo, Rio Grande do Sul Brasiliæ (THEISSEN S. J.).

Sect. 6. Scolecosporæ.

BELONIOPSIS Sacc. — Syll. VIII p. 351, XVI p. 752.

1. **Beloniopsis tropicalis** Rick, Broteria V (1906) p. 36. — Ascoma 5680 tibus sessilibus, 2 mm. latis, applanatis, ceraceis, extus glabris, succineis, centro obscurioribus; ascis 25 ~ 5, octosporis; sporidiis filiformibus, longitudine ascii, tenuissimis, hyalinis; paraphysibus filiformibus, apice sphæricis, hyalinis, epithecium nullum formantibus.

Hab. in ramo deciduo Pini, Rio Grande do Sul Brasiliæ.

2. **Beloniopsis pamparum** Speg., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) p. 450, fig. 38. — Minuta, sparsa, atra, glabra, rigidula, patellata, 120-200 µ. diam. subtus late adnata convexula, supra concaviuscula ambitu repandula, sed integra; ascis clavulatis, densiuscule furcato-paraphysatis, apice late rotundatis, 45-60 ~ 10-15, breviter crasseque pedicellatis, octosporis, jodo immutatis; sporidiis fasciculatis, rectiusculis, fusoideis, utrinque acutiusculis, 30-35 ~ 3-4, saepius 5-7-pseudo-septatis, hyalinis.

Hab. ad culmos aridos Aristidæ sp., Juares Celman pr. Cor-doba, Argentina.

GORGONICEPS Karst. — Syll. VIII p. 504, X p. 30, XI p. 419, XVI p. 753, XVIII p. 112.

1. **Gorgoniceps Baccharidis** Rehm, Ascom. Exsicc. fasc. 43, n. 1801 5682 et Ann. Mycol. VII (1909) p. 134. — Ascomatibus dispersis, sessilibus, primitus globoso-clausis dein patellaribus, disco orbiculari, rubidulo, tenuissime obscurius marginato, extus fuscidulis, glabris, excipulo tenuiter parenchymatice contexto, 0,15-0,2 mm. diam., siccis globoso-contractis; ascis cylindraceis, apice rotundatis, 80-90 ~ 9, 8-sporis; sporidiis filiformibus, rectis, pluri-septatis, hyalinis, 70 ~ 1,5, parallele positis; paraphysibus longis, filiformibus, hyalinis, 1,5 µ. cr.

Hab. ad folia Baccharidis genistelloidis; Sao Leopoldo, Rio Grande do Sul Brasilia (THEISSEN).

2. **Gorgoniceps tremellina** (Bon.) Sacc. et Trav. — Syll. XIX, p. 793 5683 — *Leptosporium* Bonorden in Bot. Zeit. 1857, p. 211, t. IV, f. C. — Ascomatibus laxe gregariis, sessilibus, superficialibus, primo clausis, subglobosis, mox lenticularibus discoideo-apertis, 2 mm. latis, excipulo fusco-atro; disco demum convexo immarginato, gela-

tinoso, flavidus; ascis tereti-clavatis, apice rotundatis, deorsum sensim tenuatis; paraphysibus filiformi-clavatis, dichotomis asco brevioribus obvallatis; sporidiis filiformibus, saepe curvulis, utrinque obtusulis, hyalinis, continuis, asco brevioribus.

Hab. in ramis dejectis Salicis sp. in Germania.

3. **Gorgoniceps candida** Speg., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) pag. 451. — Pusilla, laxe gregaria, alba, subsessilis, turbinata, carnosulo-ceracella, subsolitaria v. 2-5-gregaria, serius subpatellaris, 150-300 μ . diam., glaberrima, margine integro; ascis subfusoides, filiformi-paraphysatis, utrinque attenuatis, brevissime noduloso-suffultis, 70 \times 7, octosporis; sporidiis filiformibus multi-guttulatis, fasciculatis, utrinque obtusulis, 50-60 \times 1,5 rectis v. vix flexuosis, hyalinis.

Hab. ad folia basalia Tillandsiæ Duratii arida in horto Auctoris, La Plata Argentina.

4. **Gorgoniceps phragmospora** Spegazz., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) p. 451. — Parva, sessilis, ceraceo-ochroleuca, disco pruinula e roseo cinerescente tecta, seriata, saepe bi-ternato-confluens, 1-3 mm. long., 1-1,5 mm. lat., coriacella, supra demum convexula, margine integro; ascis linearibus apice rotundatis, breviter cuneato-pedicellatis, 180-200 \times 8, octosporis; paraphysibus filiformibus, densis, apice grumoso-coalescentibus; sporidiis asci longitudinalis, articulis utrinque truncato-rotundatis, 2,5-3 μ . longis, hyalinis.

Hab. ad palos diu intemperiei expositos, Parque de La Plata Argentina. — Habitus nonnihil licheninus v. corticioideus.

5. **Gorgoniceps jowensis** Rehm, Ann. Mycol. IV (1906) p. 338. — 5686 Ascomatibus dispersis, sessilibus, subglobosis, in stipitem brevissimum crassum elongatis, demum disco patellari, marginato, mox convexulo et emarginato, albescente, extus glabris, cæruleo-viridulis, 0,2-0,5 mm. diam. et alt., siccis disco suburceolato, dilute fuscido, excipulo ad basim fusco ceterum hyalino, prosenchymatico; ascis clavatis, apice rotundatis, 80-100 \times 10-12, octosporis, jodo immutatis; sporidiis subcylindraceis, interdum subcurvatis, plerumque rectis, utrinque rotundatis, transverse 7-septatis, haud constrictis, hyalinis, 30-33 \times 3-4, distichis; paraphysibus filiformibus, 2 μ ., versus apicem 2,5-3 μ . cr. et subcurvatis, hyalinis.

Hab. ad lignum vetustum, Mt. Pleasant Iowa Americae bor. (SEAVIER). — Affinis *Gorgonicipiti pumilionis*.

ERINELLA Sacc. Syll. VIII p. 507, X p. 30, XI p. 419, XIV p. 789,
XVI p. 753, XVIII p. 113.

1. **Erinella æruginosa** P. Henn., Hedwigia XLV (1905) pag. 30. — 5687

Mycelio æruginoso; ascomatibus sparsis v. aggregatis, stipitatis, primo subgloboso-clausis, dein cupulatis, ceraceis, extus dense æruginoso-tomentosis, pilis c. 100-200 \approx 3-3,5, æruginosis, septatis, disco pallido levi, margine albido fimbriato, c. 1-2 mm. diam.; ascis clavatis, apice obtuse rotundatis, 8-sporis, 80-100 \approx 9-11, paraphysibus filiformibus, 2-2,5 μ . cr., apice paullo incrassatis; sporidiis subdistichis v. subtristichis, longe fusoideis, utrinque acutiusculis, 3-septatis, dein constrictis, hyalino-cyanescentibus, 30-45 \approx 3,5-4.

Hab. in ligno putri Quercus pedunculatae in silvis prope Michailowskoe Rossiae (MOSKOLOFF).

2. **Erinella africana** Syd., Deutsche Zentral-Afrika Exped. (1907-1908) 5688

II Bd. p. 100. — Ascomatibus sparsis, distincte stipitatis, cupuliformibus, extus albo-flavidis, tenuiter pruinuloso-tomentosis sed vix pilosis, disco carneolo, margine crassiusculo, leniter infexo, $\frac{3}{4}$ - $\frac{1}{3}$ mm. diam.; stipite concolore $\frac{1}{2}$ -1 mm. longo; ascis cylindraceis, apice obtusis, breviter stipitatis, 70-115 \approx 8-11, octosporis; sporidiis bacillari-fusoideis, continuis, hyalinis, utrinque lenissime attenuatis, 32-42 \approx 3, paraphysibus numerosis, simplicibus, linearibus, rectis, ascos parum superantibus, c. 3-3,5 μ . cr.

Hab. ad ramos putres, Bukoba in Africa tropicali.

3. **Erinella difficillima** (v. Höhn.) Sacc. et Trott., *Dasycephyllea diffi-* 5689

cillima v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) p. 393. — Ascomatibus solitariis v. parce cæspitosis, vix pedicellatis, basi angustatissima insidentibus, 0,5-1 mm. sessilibus, depresso-patellaribus, margine leniter involuto, extus et margine crebre albo-pilosis; contextu distincte fibroso; disco pallide flavo-aurantiaco; ascis cylindraceo-clavatis, supra obtuse conoideis, basi sensim in pedicellum 20-40 μ . longum tenuatis, 130-140 \approx 12, octosporis; paraphysibus tenuissimis, filiformibus, septatis, apice acutis, 2-2,5 μ . cr.; sporidiis pluries seriatis, rectis vel curvulis, cylindraceo-filiformibus, basi crassioribus, utrinque obtusulis, 7-13-septatis, 60-115 \approx 2,5-3. J +.

Hab. in vaginis putrescentibus Bambusa, in horto bot. Buitenzorg in ins. Java. — *Er. simillimæ* (B. et Br.), *Er. calosporæ* Pat. et Gaill., *Er. tjbodensi* P. Henn., *Er. disciformi* P. Henn. affinis.

4. **Erinella javensis** v. Höhn., Stzb. k. Ak. d. Wiss. Wien, CXVIII 5690

Syll. fung. XXII (1-1913)

Abt. I (1909) p. 394. — Ascomatibus gregariis, stipitatis e globo subpatellariter effusis, 1-1,5 mm. latis, extus albis, disco paleo vitellino; stipite 0,5 mm. long., 180-200 μ . cr., alto, pilosulo, intus cum excipulo fibroso, margine ascomatis asperulo, subcurvulo; hypothecio laxe plectenchymatico ex hyphis 2-3 μ . cr. efformato; ascis cylindraceo-clavatis, supra obtusulis, 64 \times 5,5, octosporis; paraphysibus filiformi-lanceolatis, supra acutiusculis, ascos parum superantibus; sporidiis polystichis, plerumque rectis, aciculatis, utrinque acutiusculis, contentu nitido homogeneo, apparet unilocularibus, sed vero 10-15 septis tenuibus transverse divisionis, 16-23 \times 1,6-2. J +.

Hab. in ramulis siccis in Horto bot. Buitenzorg in ins. Java.

5. *Erinella subcervina* Bres., in Rick Fungi austro-amer. III, n. IV, 5691 n. 51, Ann. Myc. v. IV (1906) pag. 309. — *Lachno avellaneo-melleo* Starb. affinis sed sporidiis 3-septatis diversa.

Hab. in Brasilia, America austr.

Fam. 5. Ascobolaceæ Boud.

Sect. 1. Hyalosporæ.

ASCOPHANUS Boud. — Syll. VIII p. 528, X p. 32, XI p. 421, XIV p. 793, XVI p. 758, XVIII p. 116.

1. **Ascophanus argentinensis** Speg., Myc. Arg. IV, in An. Mus Buenos Aires (1909) p. 452. — Ascomatibus dense gregariis superficialibus primo obconico-turbinatis, dein subcollapsis atque hemisphaericis, aurantiis, 2-3 mm. diam., extus glabris, contextu grosse parenchymatico-vesiculoso; ascis apice rotundatis cylindraceis, basi abrupte cuneatis, breviter pedicellatis, 160-200 \times 25, octosporis, jodo leviter tinctis; paraphysibus filiformi-clavulatis 5-10 μ . cr., aurantiis; sporidiis mono-distichis tunica mucosa crasse obvolutis, utrinque obtuse rotundatis, 25-28 \times 14-18, hyalinis, saepius 1-nucleatis.

Hab. in stercore felino putri in domo auctoris, La Plata Argentina. — Ad Pezizeas notis plurimis nutat.

2. **Ascophanus pseudogranuliformis** Speg., Myc. Arg. in An. Mus. Buenos Aires (1909) p. 453. — Ascomatibus sparsis, turbinatis, sessilibus, citrinis, glabris, minutis, serius fere cylindraceis, 1-1,5 mm. alt. et lat., supra truncatis, margine integris; ascis cylindra-

ceis longissime pedicellatis, aparaphysatis, apice subtruncatis, jodo immutatis, 75-85 \times 10-12 p. sp.; stipite 80 \times 5; sporidiis cylindro-ellipsoideis, hyalinis, octonis, utrinque obtuse rotundatis, 13-15 \times 7-7,5, saepe centro 1-guttatis.

Hab. in fimo vaccino putri, Cerro San Bernardo, Salta, Argentina. — Imprimis ascis aparaphysatis longissime pedicellatis dignoscendus.

3. **Ascophanus Coemansii** Boud. Mém. Ascob. p. 54, tab. X, 30, in 5694 Ann. Sc. Nat. 5 ser. Bot. t. X, 1869, *Ascobolus granuliformis* Coem., Kickx p. p. — Minutus 0,5-1 mm. latus, sparsus v. aggregatus, aurantiaco-olivascens, convexus, glaber, paraphysibus capitato-clavatis, clava luteo-virente; receptaculo levi, disco convexo minute papillato, aurantiaco-olivascente aut fulvescente; paraphysibus septatis, simplicibus aut divisis, ad apicem capitatis, luteo-virentibus, ad basim hyalinis; ascis minutis, subampliis, clavatis, attenuatis, hyalinis; sporidiis oblongo-ovoideis, subfusiformibus, minutis, hyalinis, maturis liberis, junioribus gelatina aggregatis.

Hab. ad stereus vaccinum vetustum, spersus v. aggregatus, circa Parisios et Montmorency Galliae et in Belgio. — Ab *Asc. minutissimo* statura et colore diversus, ab *A. granulato* colore, forma et magnitudine ascorum sporidiorumque et paraphysibus apice magis inflatis coloratis.

4. **Ascophanus lacteus** (Oke. et Phill.) Sacc. — Syll. VII, p. 528 — 5695 var. **macrosporus** Heimerl, Niederösterr. Ascob. p. 25, t. I, f. 10 extr. — Ascis 88-120 \times 21, clavatis, paraphysibus distincte septatis cylindraceis obvallatis; sporidiis subdistichis, 12-13,5 \times 8-8,5.

Hab. frequenter in fimo equino, Schönbrunn et in stercore putrido cervino, Pressbaum Austriæ. — var. **micosporus** Heimerl, l. c. p. 25, t. I, f. 9. — Ascis 73-80 \times 10-14, paraphysibus filiformibus obsolete septatis obvallatis; sporidiis submonostichis, 8,5 \times 9,6. — Cum precedente.

5. **Ascophanus belgicus** B. R. S. in Saccardo, Not. Myc. VI, Ann. 5696 Myc. v. III (1905) p. 507. — Ascomatibus sessilibus, glabris, 1-2 mm. diam., sparsis v. subconfluentibus, hemisphaericis, mox disco planiusculo, papillato, initio fulvis, dein purpurascens, denique atro-brunneis, margine reflexo undulato; ascis cylindraceis, apice obtusis, breve noduloso-stipitatis, 75-90 \times 10, stipite 14-16 p. long.; paraphysibus copiosis, asco longioribus, 2-3-furcatis clavula interdum prolifera hyalina terminatis; sporidiis monostichis, ellipsoideis, continuis, crasse 1-guttatis, hyalinis, 10-12 \times 8-10.

Hab. in fimo Cuniculorum, La Panne, Furnes Belgii.

6. **Ascophanus chartarum** Kirschst., Verh. Bot. Ver. Brandenburg, 5697 XLVIII (1906) p. 46. — Ascomatibus gregariis, sessilibus, flavo-succineis v. flavidо-rubris usque ad 0,5 mm. diam.; ascis late clavatis in pedicellum tenuatis, supra rotundatis, 36-40 \times 10, octosporis; sporidiis suboblique distichis, hyalinis, irregulariter ovoideis, 6-8 \times 3; paraphysibus filiformibus, hyalinis, supra usque 2 μ . cr.

Hab. in charta putrida, prope Rathenow Germaniae.

7. **Ascophanus magnificus** Kirschst., Verh. Bot. Ver. Brandenburg, 5698 XLVIII (1906) p. 46. — Ascomatibus sparsis, insidentibus, primum globosis, dein depresso lenticularibus, pallidis fere hyalinis, demum roseis, molle ceraceis, ob ascos prominentibus punctulatis, 0,5-2 mm. diam.; excipulo parenchymatico, flavidо v. roseo; ascis clavatis, vix pedicellatis, crasse tunicatis, apice depresso crasseque tunicatis, operculatis, octosporis, 275-300 \times 35-40; sporidiis monostichis v. supra distichis, hyalinis, unilocularibus, eguttulatis, ellipsoideis, bitunicatis, tunica externa asperulata, 20-25 \times 13-16; paraphysibus infra roseis, septatis, 6 μ . circ. cr., supra clavatis hyalinis, guttulato-farctis, 10-12 μ . cr.

Hab. ad truncum pineum putrem prope Gross-Behnitz Germaniae.

CUBONIA Sacc. — Syll. VIII p. 527, XIV p. 792.

1. **Cubonia niepolomicensis** Rouppert, Bull. Ac. Sc. Cracovie (1908) 5699 p. 650. — Fungillus argenteo-albus, 0,5-1 mm. latus, excipulo pseudoparenchymatico; ascis cylindraceis, octosporis, 140-180 \times 24, paraphysibus filiformibus longioribus; sporidiis perfecte sphæricis, 12-15 μ . diam. æquantibus, hyalinis, dein paululo lilacinis, verrucosis.

Hab. in fimo canino, in silva Puszczы Niepolomska dicta, in Polonia.

EXOGONE P. Henn., Verh. Bot. Ver. Prov. Brandenburg L (1908) p. 130 (Etym. *exo* extus et *goneia* generatio). — Excipulum nullum; ascomata depresso globosa, libera, supra hypothecium verruciforme pseudoparenchymaticum efformata; ascis clavatis, octospori, paraphysibus ascos superantibus; sporidia ellipsoidea v. subglobosa, hyalina, tunica verrucoso-punctata; mycelium saprophyticum repens. — Genus incertæ sedis.

1. **Exogone Keiseriana** P. Henn. l. c. p. 130, cum icon. — Ascoma- 5700

tibus solitariis v. gregariis, subglobosis, albidis, basi applanatis, flavidis, 1-2 mm. diam., mycelio repente, septato, ramoso; ascis clavatis, supra rotundatis v. applanatis, octosporis, 160-200 \times 25-33; paraphysibus sæpe ramoso-septatis, supra subclavatis et 10-12 μ . incrassatis; sporidiis supra plerumque distichis, ellipsoideis dein verisimiliter subglobosis, primum levibus dein punctato-verruculosis hyalinis v. tunica flavidula præditis, 15-22 \times 15-18.

Hab. in foliis pineis et in caulis Brassicæ oleraceæ, Schöneberg Berolini Germaniæ.

Sect. 1. Phæosporæ.

ASCOBOLUS Pers. — Syll. VIII p. 514, X p. 31, XI p. 420, XIV p. 793, XVI p. 760 et 1149, XVIII p. 118.

1. **Ascobolus Michaudi** Boud., Icon. Mycol. t. II, pl. 409 (1906) Hist. 570 et Classif. Discomyc. Europe (1907) p. 71. — Minutus 1-2 mm. latus, turbinatus aut breviter stipitatus, luteus, extus glaber hymenio ascis nigro-punctatus; ascis clavatis, octosporis, 150-200 \times 20-25, paraphysibus linearibus, ad apicem vix incrassatis, septatis, 5-7 μ . crassis et ut ascis in gelatina lutea immersis; sporidiis ellipsoideis, striatis, junioribus albis, maturis violaceis et irregulariter in ascis maturascentibus, 23-25 \times 13-14.

Hab. in fimo equino in départ. Rhône, Gallia. — Ab *Asc. marginato* differt statura minori, colore semper flavo, ascomate extus glabro etc.

2. **Ascobolus immersus** Pers. — Syll. VIII, p. 523 — var. *andinus* 5702 Spec., Myc. Arg. IV in Ann. Mus. Buenos Aires (1909) p. 452. — Ascomatibus hemisphæricis, parvis, 1-1,2 mm. diam., supra truncatis, viridi-flavescentibus glaberrimis; ascis tetrasporis 200 \times 60, paraphysibus non clavulatis obvallatis, jodo tinctis; sporidiis 58-60 \times 38-40 primo hyalinis demum opace fuligineis, semper nudis.

Hab. in fimo vaccino prope Mendoza, Argentina.

3. **Ascobolus behnitziensis** Kirchst., Verh. Bot. Ver. Brandenburg, XLVIII (1906) p. 47. — Ascomatibus solitariis v. paucis aggregatis, primum globoso-clausis, dein apertis et acute marginatis, demum patentibus, extus brunneo-olivaceis, furfuraceo-striatis; disco primum concolori, demum obscure- v. nigro-brunneo, usque 1 cm. diam.; ascis cylindraceis, dein clavatis, pedicellatis, supra rotundato-operculatis, 160-200 \times 14-20, octosporis; sporidiis monostichis

- v. irregulariter distichis, primum pallide dein obscure brunneis
 v. pallide dein obscure violaceis, ovoideis, reticulato-striatis, 15-
 26 \times 9-16; paraphysibus filiformibus, griseo-olivaceis, conglutinatis.

Hab. in argillosis prope Gross-Behnitz Germaniæ. — Inter *A. carbonarium* Karst. et *A. atro-fuscum* Ph. et Pl. medius.

4. **Ascobolus striato-punctatus** Boud., Icon. Mycol. t. II, pl. 13 (1906) 5704
Hist. et *Classif.* Discomyc. Europe (1907) pag. 72. — Pro genere
 medius, 2-5 mm. latus, luteo-virens dein subolivaceus, extus oli-
 vaceo-furfuraceus, ascomatibus hemisphaericis dein convexis, disco
 nigro-punctato; ascis majoribus, clavatis, 280-320 \times 28-30, para-
 physibus tenuibus ad apicem clavulatis 7-12 μ . cr. terminatis et
 ut ascis in gelatina lutea immersis; sporidiis majoribus, fusiformi-
 bus, violaceis, 30-35 \times 12-13, striis simplicibus aut divisis longitu-
 dinalibus et crebre punctatis ornatis.

Hab. ad terram argillaceam in silvis Montmorency, Gallia. —

Ascob. viridi affinis sed differt sporidiis striis tenuioribus magis
 numerosis transverse punctulatis, praeditis.

5. **Ascobolus mirabilis** Dangeard in Botaniste, X (1907) pag. 321, 5705
tab. 67-70. — Mycelio araneoso; ascomatibus immaturis sphæroi-
 deis v. ovoideis initio clausis, supra glabrescentibus; ascis spori-
 diisque nondum evolutis visis; quoad evolutionem ascogonii cfr.
Dang. l. c.

Hab. cultus in Agar in laboratorio botanico Poitiers. — Ipse
 cl. auctor fatetur speciem genuinam non condidisse, sed tantum
 dedisse nomen ad interim ut sua expositio bio-morphologica sub
 nomine quodam militaret.

RUHLANDIELLA P. Henn. — Syll. XVII, p. 241. — Ex errore ca-
 lami in Syll. l. c. inter Gasteromycetes locata, transferri debet ad
 Discomyctes prope *Gymnodiscum* — Syll. VIII, p. 545.

Fam. 6. Dermateaceæ Fr.

Sect. 1. Hyalosporæ.

MIDOTIS Fr. — Syll. VIII p. 547 pp.

1. **Midotis Heinricherii** Bres., Ann. Mycol. V (1907) p. 242. — Ve- 5706
 geta aurantiaca, carnosò-lenta; stipite communi crasso, rugoso, 2-3

cm. longo crassoque, sursum varie ramoso; ramis compressis, villosis, in cupulas auriformes vel spathulatas, profunde lobato-incisas, abeuntibus; cupulis extus villosis, marginibus reflexis; hymenio levi; ascis clavatis, basi tortuoso-stipitatis, jodo haud tinctis, 100-110 \times 6-7; paraphysibus ramosis, 2 μ . crassis, apice incrassato, saepe curvato, 3 μ . crasso; sporidiis ellipticis, hyalinis, 6-7 \times 3-3 $\frac{1}{2}$; contextu excipuli parenchymatico; pilis septatis, 100-250 μ . longis, basi 8-9 μ . crassis.

Hab. ad ligna in insula Java (HEINRICHER). — Totus fungus 7-8 cm. altus, 5-6 cm. latus habitu fere *Sparassis crispa*; in vegeto aurantiacus, in alcohole luride luteus, truncо fuscidulo.

2. *Midotis americana* (Thaxt.) Sacc. et Trav. — Syll. XX, p. 92 — 5707
Wynnea americana Thaxt. Bot. Gaz. (1905) XXXIX pag. 246, tab. IV-V. — Sclerotio molli, subgelatinoso, in 'sicco coriaceo, irregulariter lobato, brunneo, circiter 50 \times 40 mm.; ascomatibus paucis v. usque ad 25, typice simplicibus raro multiplicibus, erectis, elongatis subauriculatis, magnitudine variabilibus circ. 130 \times 60 mm., margine subinvoluto, extus nigro-brunneis, minute verruculosis, margine subpilosus; disco æquali, rubro-purpureo v. brunneo; ascis elongatis 500-540 \times 18, octosporis; paraphysibus septatis simplicibus v. irregulariter ramosis, clavatis, apice brunneolis; sporidiis subcymbiformibus, 32-40 \times 15-16, utrinque apiculatis v. papillatis, granuloso-farctis et grosse subguttulatis.

Hab. ad terram in silvis, Burbank, East Tennessee et Craberry North Carolina America bor.

DERMATEA Fr. — Syll. VIII p. 550, XI p. 422, XIV p. 794, XVI p. 762, XVIII p. 122.

1. *Dermatea olivacea* Kirschst. Verh. Bot. Ver. Brandenb. XLVIII 5708 (1906) p. 40. — Ascomatibus e cortice cæspitose erumpentibus in stromate indistincto brunneolo insidentibus, primum clausis, globosis, dein hemisphærice apertis et discum obscure olivaceum ostendentibus, sessilibus, extus brunneo- v. viridi-pruinosis, firme ceraceis, 0,5 mm. circ. diam.; excipulo prosenchymatico, olivaceo; ascis clavatis, breviter pedicellatis, supra rotundatis v. obtuse conoideis incrassatulis, 90-100 \times 18-20, octosporis; sporidiis laxe distichis, oblongis, pluriguttulatis, basi acutatis, hyalinis, quadrilocularibus, 18-20 \times 8-9; paraphysibus ascos longitudine æquantibus, hyalinis v. chlorinis, filiformibus, ramosis, supra rotundatis, quandoque etiam clavatis.

- Hab.* in ramis dejectis Pruni domesticæ, prope Gross-Behnitz Germaniæ. — Gen. *Pezicula* Tul. forte adscribenda.
2. **Dermatea olivascens** Rehm, Ascomyctes exs. (1907) n. 1686, 5709 Ann. Mycol. V (1907) p. 80. — Ascomatibus dispersis, primitus immersis, per epidermidem prorumpentibus, plerumque solitariis, subglobosis, mox patellaribus marginatisque, demum disco convexulo, olivaceo-fusco, pulverulento, 0,5-1,5 mm. diam. in stipitem brevissimum elongatis, excipulo fuscidulo parenchymatice contexto, ceraceis; ascis clavatis, imprimis ad apicem crasse tunicatis, 150 × 20-25, octosporis; poro jodo violaceo-tincto; sporidiis ellipsoideis, utrinque subrotundatis, 1-cellularibus, guttam oleosam permagnam includentibus, hyalinis, 20-25 × 10-12, distichis; paraphysibus filiformibus, septatis, 2 µ. cr. et versus apicem ramosis et usque ad 4 µ. cr. fuscidulis, epithecium crassum formantibus; hypothecio crasso, flavo.
- Hab.* in ramis ? emortuis Cratægi spec., Mt. Pleasant Jowa Amer. bor. (F. J. SEAVER). — A *Derm. cratægicola* Dur. sporidiis multo minoribus diversa.
3. **Dermatea Rickiana** Rehm, Ann. Mycol. VI (1908) pag. 319. — 5710 Ascomatibus sessilibus, rarissime solitariis, fere semper cæspitose aggregatis, demum in soros 1-2 cm. longos et latos plurimis artiissime congregatis et complicatis, cyathoideis, ab initio globoso-clausis, dein urceolatis, demum disco orbiculari explanato, crasse crenulato-marginato, alutaceo, interdum cinerescente, extus subgranulatis, 0,3-1,5 mm. diam., coriaceis, excipulo crasse prosen-chymatico fusco, hyphis ad marginem discretis; hypothecio crasso, subfusco; ascis cylindraceis, apice subtruncatis ca. 80 × 5, octosporis, jodo immutatis; sporidiis cylindraceis, rectis, utrinque obtusis, unicellularibus, cum guttis oleosis duabus submagnis, hyalinis, 6 × 1,5, monostichis, rarius distichis; paraphysibus filiformibus, ca. 3 µ. crassis, obtusis, hyalinis, prominentibus.
- Hab.* ad culmum Guaduæ Taquaræ, parasitans in Rhopographo Taquaræ, São Leopoldo, Rio Grande do Sul Brasil (RICK S. J.). — *Cenangio helvolo* Jungh. proxima.
4. **Dermatea mycophaga** Massee, Kew Bull. (1910) p. 218. — Ascomatibus sessilibus carnosis, aggregatis, mox applanatis, disco ferrugineo, extus glabrato, obscuro, 0,5 mm. diam.; ascis; sporidiis monostichis, ellipsoideis, hyalinis, glabris, eguttulatis, 5 × 3; paraphysibus filiformibus, sursum ramosis, brunneis.
- Hab.* in stromate vetustæ Xylariæ pr. Malacca (RIDLEY).

CENANGIUM Fr. -- Syll. VIII p. 556, X p. 36, XI p. 423, XIV p. 795, XVI p. 763, XVIII p. 125.

1. **Cenangium heteropatelloides** Rehm, Contr. mycol. Hung. (Növ. 5712 Közl. 1905) p. 3, Extr. — Ascomatibus sparsis, sæpe binis sessilibus, primitus globoso-clausis, dein brevissime crasse stipitatis, disco urceolato, denticulato-marginato, nigro-purpureo, denique subpatellaribus crasseque marginatis, excipulo glabro, crasso, fusco-nigris, 0,25-1,5 mm. diam., ceraceis siccis sæpe gyroplicatis; ascis clavatis, apice obtuse acutatis, 36-45 \times 6-7, octosporis; sporidiis cylindraceis, rectis, 1-cellularibus, hyalinis, 6-8 \times 1,5, distichis; paraphysibus filiformibus, septatis, haud clavatis, dilute purpureis, subconglutinatis.

Hab. ad caules Aconiti in alpibus hungaricis (prof. LINHART). Margine primitus denticulato *Heteropatellæ* similis, ceterum plane diversa species.

2. **Cenangium rosulatum** von Höhnel, Sitzb. k. Ak. d. Wiss. Wien, 5718 CXV Abt. I (1906) pag. 649, cum icon. — Ascomatibus 6-20 e cortice erumpenti-subconnatis, hemisphæricis, rosulas 4-6 mm. latas efformantibus, coriaceo-carnosulis ex umbrino fuligineis, siccis nigricantibus, plus minus poculiformibus, 1-1,5 mm. diam., extus albo-pulveraceis, margine distincte albo-flocculosis; paraphysibus nullis v. paucis, filiformibus, hyalinis; ascis cylindraceis 70-110 \times 6-8, octosporis; sporidiis hyalinis, distichis, unilocularibus, subbotuliformibus, 10-14 \times 2-2,5, raro usque ad 20 μ . long. J -.

Hab. in ramulis putrescentibus Salicis purpureæ prope Tulln Austriae inf. — *Cen. tryblidiodi* Ell. et Ev. affine a quo differt præcipue ascomatibus subconnatis. A *C. salicello* v. Höhn. et *C. Salicis* Schr. omnino diversum.

3. **Cenangium Pinastri** Karst., Acta Soc. pro Faun. et Fl. fenn. XXVII 5714 (1906) L, pag. 13. — Ascomatibus sessilibus, cæspitosis, coriaceo-membranaceis, levibus, subfarinaceis, fuscis vel fusco-nigrescentibus, epidermide secedente superficialibus, difformibus, hymenio pallidiore, 2-5 cm. latis; ascis cylindraceis, circiter 160 \times 7-9; sporidiis monostichis, eguttulatis, rectis, 7-9 \times 4-5; paraphysibus filiformibus.

Hab. ad ramos aridos Pini silvestris prope Kuopio Fennia (O. LÖNNBOHM). — *Cen. populneo* affine, sed differt ascomatibus minoribus, ascis sporidiisque diversis. *Cenangium populneum* (Pers.) Rehm, teste cl. Voglino, Ann. R. Accad. Agricolt. Torino LII (1909) p. 284 est status ascophorus *Dothichizæ populeæ* Sacc. et Briard.

4. *Cenangium luteo-griseum* v. Höhn., Stzb. k. Ak. d. Wiss. Wien 5715 CXVIII, Abt. I (1909) p. 379. — Ascomatibus coriaceis, sparsis v. paucis cæspitose gregariis, breviter crasseque stipitatis, 1-2,5 mm. diam. primum globoso-clausis, dein apertis et subpatellaribus, margine albo v. flavidulo pilis hyalinis 80 \times 2-3 velutino, revoluto; disco flavo-sulphureo v. citrino, dein obscure flavo, extus leví e griseo brunneo-cinereo; stratu hymeniali 50-55 μ . cr.; hypothecio 200-250 μ . cr. plectenchymatico, basi et stipite brunneolis subparenchymaticis; excipulo brunneolo; ascis cylindraceo-clavatis, sessilibus, supra obtusis, 48-53 \times 4-5, octosporis; paraphysibus filiformibus rigidis, 2 μ . cr. ascos subæquantibus; sporidiis distichis ex elongato cylindraceis, plerumque curvulis, utrinque obtusulis, hyalinis, 5-7 \times 1,7-2. J -.

Hab. in ligno duro rubro-brunneo Dicotyledoneæ cujusdam, Tjibodas in ins. Java. — Cum *Cen. chrysopraso* Cooke et *Helotio discreto* Karst. comparandum.

5. *Cenangium fallax* Rick, Broteria III (1904) fasc. IV, pag. 288. — 5716 Ascomatibus gregariis, subsessilibus, coriaceis, 2-3 mm. latis, externis primitus albis, pruinatis, dein fulvis, disco-brunneo-fusco, griseo-pruinato; in subiculo griseo, dein fulvo insidentibus; margine subtumido, excedente; ascis cylindraceis, gracilibus, 80 \times 3, stipitatis; sporidiis monostichis, hyalinis, ovoideis, biguttulatis, unilocularibus, 6 \times 3; subiculo etiam in speciminibus maturis bene evoluto et ascomata circumeunte.

Hab. in stromatibus et stipitibus Xylariæ cujusdam, Rio Grande do Sul, Brasilia. — *Cen. tahitensi* Pat. affinis species sed colore omnibus partibus albo-griseo et matrice satis diversa.

6. *Cenangium Umbellatarum* Ces. — Syll. VIII, p. 564 — var. *Cynanchi* Rehm, (Esterr. Bot. Zeitschr. LVI (1906) p. 343. — (Nomen nudum).

Hab. in caulis Cynanchi Vincetoxicii, Innschlucht supra Landeck, Austria.

TYMPANIS Tod. — Syll. VIII p. 578, X p. 36, XI p. 424, XIV p. 798, XVI p. 764, XVIII p. 127.

1. *Tymparis acerina* Rehm, Contr. mycol. Hung. (Növ. Közl. 1905) 5718 p. 4, Extr. — Ascomatibus primitus peridermio innatis, dein 4-10 arcte in cæspitulos congregatis, per epidermidem laciniatim fissam prorumpentibus, globoso-clausis, dein patellaribus, disco orbiculari plano marginato, versus basim angustatis, 0,5-1 mm. diam., disco

udo cinereo-nigro, siccis atris, coriaceis; ascis cylindraceis, apice rotundatis, 120-130 \times 12-15, jodo immutatis; sporidiis spermatio-deis hyalinis, curvatalis, 1,5 \times 1, innumeris repletis (sporidiis ipsis nondum repertis); paraphysibus filiformibus, septatis, 2 μ ., versus apicem 3 μ . cr. ibique flavidulis conglutinatis; hypothecio fuscido crasso.

Hab. in ramulo *Aceris campestris*, Berencsfalú, prope Selmeczbánya, Hungariae (KMET). — Hucusque nulla *Tympinis* in *Acere* descripta.

2. *Tympinis Myricariæ* Rehm, (Esterr. bot. Zeitschr. LVI (1906) 5719 p. 343. — (Nomen nudum).

Hab. in ramulis *Myricariæ germanicæ*, Pfitschertal, Austria.

Sect. 2. Phæosporæ.

PHÆANGIUM Sacc. — Syll. VIII p. 592, X p. 37, XI p. 424, XIV p. 798, XVIII p. 128.

1. *Phæangium Vogelii* P. Henn., Verh. Bot. Ver. Prov. Brandb. L 5720 (1908) p. 132. — Ascomatibus sparsis v. cæspitosis, erumpenti-superficialibus, coriaceis, primo clausis dein cupulatis, sessilibus, sulcato-rugosis, rufo-brunneis v. castaneis, pilis filiformibus, septatis, siæpe flexuosis, brunneis v. castaneis 100-250 \times 10-20 vestitis, disco atro-fusco, levi, circ. 1-1,5 mm. diam.; ascis cylindraceo-clavatis, vertice obtuse rotundatis, octosporis, 60-80 \times 4-5; paraphysibus repetito-ramosis, filiformibus, apice vix incrassatis, guttulatis, hyalinis, c. 2 μ . cr.; sporidiis oblique monostichis, ellipsoideis, biguttulatis, 7-9 \times 3,5-4, fusco-atris; hypothecio ochraceo.

Hab. in trunco acerino prope Tamsel Gesmania (VOGEL).

2. *Phæangium sphæroides* Ell. et Ev. Bull. South Calif. Ac. of Sc. IV (1905) p. 62. — Gregarium; ascomatibus rotundis, nigris, levibus, primum globosis dein depressis obconicis, disco plano vel concavo, udis convexis, $1\frac{1}{2}$ - $3\frac{1}{2}$ mm. diam., siccis margine incurvato; ascis cylindraceis, p. sp. 50-55 \times 4; paraphysibus obscuris; sporidiis monostichis, oblongo-ellipsoideis, subopacis, 6-8 \times 3-4.

Hab. in ligno dealbato *Rhamni* et *Rhois laurinae*, Aragon, Catalina Isl., California (C. F. BAKER).

HYMENOBOLUS Mont. — Syll. VIII p. 587.

1. **Hymenobolus Kmetii** Rehm, Contr. mycol. Hung. (Növ. Közl. 1905) 5722

p. 4, Extr. — Ascomatibus sparsis, primitus sub cortice exteriore nidalantibus, globoso-clausis, dein per peridermum elevatum varieque dilaceratum erumpentibus, excipulum irregulariter laciniatim apertientibus et discum patellarem orbicularem, demum saepe lirellæ-formiter curvatum, fusco-nigrum denudantibus, extus fuscis, glabris, excipulo crasso parenchymatico, siccis corrugatis, 2-4 mm. long., c. 1 mm. lat.; ascis cylindraceis, apice rotundatis, haud incrassatis, 4-sporis, 100-120 \approx 25; sporidiis oblongo-globulosis, glabris, unicellularibus, haud guttatis, fuscis, 25 \approx 18, strato mucoso lato obductis, 1-stichis; paraphysibus filiformibus, 2 μ ., ad apicem dilute fuscescerentem 3 μ . cr., septatis, conglutinatis; hypothecio flavidulo.

Hab. in ramo emortuo *Quercus*, Berencsfalu, prope Selmeczbanya, Hungariæ (KMET). — Species valde memorabilis a *Stictophacidio* excipulo multo crassiori paraphysibusque haud ramosis diversa.

*Sect. 3. Didymosporæ.***CENANGELLA** Sacc. — Syll. VIII p. 587, X p. 37, XI p. 424, XIV p. 798, XVIII p. 127.

1. **Cenangella spiræcola** P. Henn. Hedw. XLV (1905) pag. 29. — 5728
Ascomatibus sparsis v. subaggregatis, erumpentibus, primo sub-turbanatis clausis, atris, dein subcupulatis, breve stipitatis, 400 μ . c. cr., coriaceis, striatulis, margine crenulatis, fimbriatis, contextu atro-olivaceo; ascis cylindraceo-clavatis, obtusis, 8-sporis, 90-110 \approx 5-6; paraphysibus filiformibus, hyalinis c. 1,5 μ . cr., apice paullo usque ad 2 μ . incrassatis, superantibus; sporidiis subdistichis oblonge fusoideis, utrinque subacutiusculis, primo continuis, dein medio septatis, haud constrictis, 10-18 \approx 1,5-2.

Hab. in ramis siccis Spirææ, Michailowskoe Rossiae (MOSSELOFF). — Habitus *Scleroterridis Spirææ* Rehm.

2. **Cenangella alnicola** Rehm, Contr. mycol. Hung. (Növ. Közl. 1905) 5724
p. 3, Extr. — Ascomatibus solitariis v. binis, primitus innatis, per peridermum laciniatim disruptum erumpentibus, primitus clausis, turbinatis, brevissime crasse stipitatis, dein disco urceolato, demum patelliformi, orbiculari, crasse marginato, nigro-fusco, extus gla-

bris, obscure fusco-ferrugineis, prosenchymaticis, ex hyphis intricatis fuscis contextis, 1-5 mm. diam., siccis complicatis; ascis clavatis, apice rotundatis, 75-80 \times 7-9, octosporis; sporidiis oblongis, utrinque obtusis, rectis vel subcurvatis, hyalinis, medio septatis, plerumque utroque apice breviter filiformiter appendiculatis (conidiferis), 9-10 \times 2,5, distichis; paraphysibus filiformibus, versus apicem sensim 3 μ . cr. et fuscidulis.

Hab. in cortice *Alni incanæ*, Hungaria (HAZSLINSZKY sub «Dermatea furfuracea» in herb.). — Species hungarica modo colore *D. furfuracea* similis, partibus internis plane divergit, imprimis sporidiis septatis. *Cenangella alnicola* Feltg. (1903) — Syll. XVIII, p. 128 — certe diversa est, sed quoad genus incerta, hinc nomen presentis interim non mutandum videtur.

3. *Cenangella bambusicola* Rick, Broteria V (1906) p. 37. — Asco- 5725 matibus disciformibus, sessilibus, cartilagineis, duriusculis, primitus albidis, dein viridi-flavis, glabriusculis, 1 mm. latis, margine crasso involuto; ascis 70 \times 9; sporidiis fusiformibus, hyaliniis, octonis, septatis (an spuriæ?), 20 μ . longis 4 μ . latis, guttulatis; paraphysibus filiformibns, versus apicem paulatim incrassatis, multiseptatis, fere hyalinis, epithecium densum formantibus, conglutinatis cum ascis.

Hab. in ramis vivis *Bambusæ*, Rio Grande do Sul Brasiliæ.

Sect. 4. Phragmosporæ.

SCLERODERRIS Fr. — Syll. VIII p. 594, X p. 37, XI p. 425, XIV p. 799, XVI p. 765, XVIII p. 129.

1. *Scleroderris gigaspora* Massee, Kew Bull. (1910) p. 3, f. 1-5. — 5726 Ascomatibus gregariis, innato-superficialibus, cylindraceo-turbinatis v. e mutua pressione difformibus, sessilibus, extus sordide fuscis, glabris, disco concavo, 1 mm. diam.; ascis cylindraceis, sursum obtusatis, deorsum breviter tenuato-stipitatis, octosporis, 250-280 \times 22-25, paraphysibus tenuibus apice ramosis, hyalinis obvallatis; sporidiis vermiformibus, rectis v. leniter flexuosis, multiseptatis, hyalinis, 150-160 \times 7-8.

Hab. cæspitose in scutellis *Mytilaspidis citricolæ* ad folia *Citri Aurantii*, Trinidad Indiæ occid. (J. H. HAET). — Affinis *Scl. seriatæ* et *Scl. virescenti* sed ascis et sporidia multo longiora et habitatione diversa.

PHÆODERRIS Sacc. — Syll. VIII p. 599, XIV p. 32.

1. **Phæoderris Labiatarum** von Höhn., Österr. Bot. Zeitschr. LVII 5727 p. 323. — Ascomatibus innatis, sparsis, globoso-disciformibus, 400-500 μ . lat., 200 μ . alt. excipulo margine 40 μ . cr., lateraliter usque ad 120 μ . cr., ex cellulis 6-8-pluristratosis crasse tunicatis conflato donatis, extus atro-brunneis, ostiolo parentibus et laciniatim dehiscentibus; hypothecio 50 μ . cr.; ascis clavatis breve, stipitatis 90 \times 9-10, octosporis; sporidiis pluriseriatis, brunneolis, fusoideis, 6-cellularibus, medio constrictis, fere biconicis, 29-36 \times 4-5,5; paraphysibus filiformibus copiosis.

Hab. in caulinis emortuis *Salviæ glutinosæ*, Wienerwald Austriae.

*Sect. 5. Dictyosporæ.***DERMATINA** Sacc. — Syll. VIII p. 492 (ut subgen.).

1. **Dermatina javanica** v. Höhn., Fragm. Mykol. IX in Sitzb. k. Ak. 5728 d. Wiss. Wien CXVIII, Abt. I (1909) p. 1519. — Ascomatibus tenaci-carnosis, subcoriaceis, solitariis v. paucis approximatis, in stroma pallido adnato insidentibus, flavo-ochraceis v. flavo-brunneolis, dein griseo-brunneis, usque ad 700-850 μ . latis, 400-600 μ . altis, supra depresso convexis, vix marginatis, basi in pedicellum obscuriore 160-230 μ . cr., 210-260 μ . lon. abrupte angustatis; stratu hymeniali circ. 140 μ . cr.; ascis clavatis; tunica 1,5 μ . supra usque ad 4 μ . cr. præditis, basi sensim stipitiformi nodulose-que angustatis, supra attenuatis, obtusiusculis, octosporis 90-140 \times 16-21; J+; paraphysibus filiformibus apice sæpe breviter ramosis v. sensim usque ad 8 μ . claviformi-incrassatis, 1,5 μ . latis, flavo-guttulatis; sporidiis distichis, elongatis, apice rotundatis, plerumque diu unilocularibus, demum transverse 3-5-septatis, loculis mediis longitudinaliter uniseptatis, tenuiter tunicatis, hyalinis, demum flavidis, 22-28 \times 8-10,5; hypothecio 130-160 μ . cr. flavo-ochraceo, parenchymatico; excipulo margine 20 μ . circ. cr. deorsum sensim usque ad 60 μ . cr. ex hyphis extus in pilos 20 \times 9, 1-2-septatos abeuntibus; contextu pedicelli minute parenchymatico, supra plectenchymatico.

Hab. in cortice arboris cujusdam in silvis Tjibodas in ins. Java.

— *Dermateæ eucritæ* Karst. affinis.

*Fam. 7. Bulgariaceæ Fr.**Sect. 1. Hyalosporæ.*

LEOTIA Hill — Syll. VIII p. 609, XVIII p. 131.

1. **Leotia punctipes** Peck, Bull. Torr. Bot. Club XXXIV (1907) p. 102. 5729

— Ascomate subgloboso, undulato, gyroso, lucido, obscure viridi, in sicco 4-8 mm. lato; stipite angusto 1,8-3 cm. longo, 1-3 mm. cavo, minute obscure viridi-punctato, viridulo- sed pileo pallidiori; ascis cylindraceis v. subclavatis; sporidiis oblongis, rectis v. curvulis, 15-20 \times 5-6; paraphysibus filiformibus.

Hab. inter Sphagna, Stow Massachusetts Amer. bor. (S. Davis). — *Leot. chlorocephala* Schw. affinis.

2. **Leotia Batailleana** Bres., Fungi gall., Ann. Myc. vol. VI (1908) 5730

p. 47. — Ascomate globoso, levi, ceraceo, basi parva vallecula a stipite remoto, læte roseo, intus concolori sed strato ascorum aurantio-luteo, 2-3 mm. diam.; stipite farcto, ruguloso, glabro, dilute roseo extus intusque, 3-4 mm. longo, $1\frac{1}{2}$ -1 mm. crasso; ascis clavatis, 105-114 \times 6, jodo poro cærulecente; paraphysibus filiformibus, 1- $1\frac{1}{2}$ μ . crassis, apice incrassato, 2-3 μ ., granulis fuscis replete; sporidiis fusoides, uno latere subdepressis, crasse guttulatis, hyalinis, continuis, 20-30 \times 3-4.

Hab. ad terram gregarie v. subcæspitose, Jura (FRID. BATAILLE).

— Specimina vetusta tantum vidi, sed ista vix dubie ascomate luteo-aurantio gaudent e strato ascorum ita colorato (Bresad. l. c.).

Leotia species dubiæ, in Syll. XIX, p. 1073 citatæ, sunt: **Leotia helvelloides** (Corda) et **Leotia Persoonii** (Corda).

SARCOSOMA Casp. — Syll. X p. 42, XI p. 427, XIV p. 804, XVI p. 771, XVIII p. 132.

1. **Sarcosoma godronioides** Rick, Broteria V (1906) p. 32. — Asco- 5731

matibus gregariis, ramosis, ex thallo membranaceo, atro oriundis, lageniformibus, gelatinosis, 1 cm. altis, $1\frac{1}{2}$ cm. latis, stipitatis, in medio incrassatis, stipite et parte superiore angustioribus, apice extus striato et granulato, foramine minuto apertis; intus in cavae sphærica hymenium gerentibus; hymenio olivaceo 1 mm. cr.; ascis longissimis 14-18 μ . latis, paucis, octosporis; sporidiis hya-

linis v. olivascentibus, elliptico-fusoideis, apicibus acutatis, membra reticulata, 30 \times 15; paraphysibus fuscidulis, longissimis, multiseptatis, filiformibus.

Hab. in ramulis deciduis Pini, Rio Grande do Sul Brasiliæ.

2. *Sarcosoma Wettsteinii* v. Höhnel, Ergeb. Bot. Exp. Südbras. 1901, 5732 Denk. k. Ak. d. Wiss. Wien Bd. LXXXIII (1907), Extr. p. 31.

— Ascomatibus solitariis mycelio nigro-brunneo insidentibus, depresso-globosis, basi profunde depresso-plicatis, convexis, supra depresso-concavis, carnosus, margine tenui, nigro, piloso, involuto præditis, extus tomento brunneo-nigro ex hyphis violaceo-brunneis septatis, apice obtusis pallidioribus, 4-7 μ . cr. constituto; hypothecio 7 mm. cr., gelatinoso-carnoso, translucide cyaneo-albo, plectenchymatico; disco 700-750 μ . cr., supra rubro-violaceo, levi, 18 mm. lato; ascis longe cylindraceis, stipitatis, 600 \times 20, octosporis, tunica firma præditis, supra rotundatis, vix incrassatis; sporidiis supra monostichis, confertis, unilocularibus, hyalinis, crasse tunicatis, levibus, ellipsoideis utrinque attenuato-obtusis, 36-50 \times 16-18'. J -.

Hab. in caule emortuo lianæ cujusdam, prope Cerquina-Cesar, São Paulo, Brasilia.

3. *Sarcosoma orientale* Patouill., Bull. Soc. Myc. de Fr. XXV (1909) 5733 p. 3, tab. II, fig. 4. — Ascomate magno, pendulo, hemisphærico, inferne truncato, levi aut varie rugoso-plicato, tremeloso, sessili, extus atro-brunneo, minute furfuraceo, intus albido-fuliginoso; disco marginato, plano, orbiculari, pulchre aurantio-flavo; ascis cylindraceis, longissimis, 350-500 \times 20, octosporis, operculatis, paraphysibus elongatis, filiformibus, fasciculatis, apicem versus incrassatis (3-5 μ .), granulis aurantiacis repletis; sporidiis monostichis, hyalinis, ellipsoideis, magnis, 42-50 \times 16-18, crassiuscule tunicatis, verrucis obtusis parce obsexis.

Hab. in liana emortua ignota, in Valle Djirin Annam, 1600 m. alt. (EBERHARDT).

4. *Sarcosoma tetrasporum* von Höhnel, Ergeb. Bot. Exp. Südbras. 5734 1901, Denk. k. Ak. d. Wiss. Wien. Bd. LXXXIII (1907), Extr. p. 32. — Ascomatibus solitariis, obconicis, conideo-stipitatis, 2 cm. latis, 9 mm. altis, molli-gelatinosis, omnino rubro-violaceis, hypothecio 8 mm. cr. ex hyphis plectenchymaticis constituto, violaceo-rubidis, margine tenuioribus; stipite basi velutino, ascomate vero glabro, basi extus ruguloso, ceterum levi; paraphysibus numerosis, filiformibus, 2-3 μ . cr., supra quandoque incrassatulis; ascis tunica firma præditis, supra obtusatis, cylindraceis, basi sen-

sim in stipitem attenuatis, 380-400 \times 12-16, 2-3- sed plerumque 4-sporis; sporidiis monostichis, hyalinis, crasse tunicatis, ellipsoideis, saepe uno latere depresso, guttulatis, unilocularibus, 18-26 \times 12-13. J -.

Hab. in ligno putri, Morro da Senhora prope Iguape, São Paulo Brasilia.

OMBROPHILA Fr. — Syll. VIII p. 613, X p. 38, XI p. 425, XIV p. 801, XVI p. 766, XVIII p. 133.

1. **Ombrophila tamseliana** P. Henn., Verh. bot. Ver. Prov. Brandb. 5785 L (1908) p. 133. — Ascomatibus foliicolis sparsis v. gregarie cæspitosis, breve stipitatis, primo subturbinatis, clausis, dein cupulatis undulatis, marginatis, castaneis, levibus, disco castaneo, 1,5-2 mm. diam., stipite breviter cuneato c. 1 \times 0,5 mm., atro-brunneo; ascis clavatis, apice obtuse rotundatis, octosporis, 80-110 \times 6-8; paraphysibus filiformibus vix incrassatis, hyalinis; sporidiis fusoideis, utrinque subacutis, rectis v. curvulis, 2-4-guttulatis, oblique monovalv. subdistichis, hyalinis, 12-15 \times 3,5-4.

Hab. in foliis putrescentibus Betulæ prope Tamsel Germania (VOGEL). — Colore nec non sporidiis elongato-fusoideis curvulis distincta.

2. **Ombrophila Exidia** Spegazz., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) pag. 453. — Ascomatibus subsessilibus subtenuibus, extus intusque laxe ruguloso-costulatis, concavis, fuligineis, glaberrimis, udis subtremelloideis et subpellucidis, siccis subcorneis, majusculis, 5-25 mm. diam., margine acuto integro involuto; ascis linearibus, jodo vix cærulescentibus, dense paraphysatis, apice rotundatis, longe tenuato-pedicellatis, 400-500 \times 15-20, octosporis, paraphysibus fumosis septulatis, 4-5 μ . cr.; sporidiis ellipsoideis in parte sup. ascis constipatis, utrinque rotundatis, 14-16 \times 7-8, rectis v. lenissime inæquilateris, eguttulatis, hyalinis.

Hab. ad ramulos aridos putres in insula Santiago prope La Plata, Argentina (C. MARELLI).

3. **Ombrophila hirtella** Rehm, Ann. Mycol. VI (1908) pag. 314. — 5787 Ascomatibus gregariis, sessilibus, lenticularibus, primitus clausis, dein patellaribus, disco plano, orbiculari, marginato, cinereo, excipuli fusco, hyphis simplicibus, septatis, rectis, fuscis, ca. 60 \times 5-6, versus basim excipuli subhyalinis obtectis, usque ad 4 mm. diam., siccis involutis, subgelatinosis; ascis clavatis, apice rotundatis, 55-60 \times 5-6, jodi ope cærulescentibus, octosporis; sporidiis fusoideis,

rectis vel curvatalis, 1-cellularibus sine guttulis, hyalinis, 7-8 \times 2,5-3, monostichis; paraphysibus filiformibus, hyalinis, 1,5 μ . cr.

Hab. in ligno putri, Glencoe, Illinois Amer. bor. (E. T. et S. A. HARPER) — Licet pilosula, imprimis reactionis jodiceæ causa, potius *Ombrophila* quam *Lachnea*.

4. **Ombrophila Kmetii** Rehm, Contr. mycol. Hung. (Növ. Kö-l. 1905) 5788 p. 5, Extr. — Ascomatibus dispersis, sessilibus, primitus globoso-clausis, dein urceolatis, demum patellaribus, crasse marginatis, in stipitem brevissimum crassum elongatis, glabris, subferrugineis, 3 mm. d., gelatinoso-ceraceis; ascis cylindraceis, apice rotundatis, 120-130 \times 5-7, octosporis, poro jodo tinctis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, guttas 2 oleosas magnas includentibus, inde fere 2-cellularibus, hyalinis, 1-stichis, 8-10 \times 3,5-5; paraphysibus filiformibus, hyalinis, 1 μ . ad apicem 2 μ . cr.; excipulo crasso parenchymatico.

Hab. in Polyporo obliquo sessilis, Berencsfalu prope Selmeczbanya, Hungaria (KMET). — Quoad habitum et colorem *Helotiis* similis species, ab *Ombrophila firmula* (Roll.), quæ etiam Polyporum incolit, colore, ascis cylindraceis sporisque oblongis, haud fusiformibus plane differt.

ORBILIA Fr. — Syll. VIII p. 621, X p. 39, XI p. 426, XIV p. 802, XVI p. 767, XVIII p. 137.

I. *Eu-Orbilia*: paraphysibus apice capitulatis.

1. **Orbilia mollisoides** v. Höhn., Fragm. Mykol. (1909) IX, in Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 1521. — Ascomatibus superficialibus epiphyllis in maculis 1-10 mm. latis, irregulariter rotundatis, pallidis modice gregarie insidentibus, primum flavo-brunneis obscurius marginatis, depressis, siccis obscure brunneis, incurvatis, 120-230 μ . latis, rotundatis, basi usque ad 65-85 μ . angustatis, ibique rotundatis, obscure brunneis, marginatis; contextu basi tenuiter plectenchymatico; excipulo parenchymatico; ascis clavatis, breviter pedicellatis, supra rotundatis v. parum conoideo-angustatis, octosporis, 44-56 \times 6-8; paraphysibus filiformibus 1,5-2 μ . cr. supra conoideo-globosis et 4 μ . cr. et epithecium efformantibus; sporidiis mono- v. distichis, hyalinis, unilocularibus, elongato-fusoides, apice obtusulis, rectis v. vix incurvatis, 8-12 \times 1,5-2. J +.

Hab. in foliis putrescentibus *Quercus rubræ*, Kurpark in Schandau Saxonia (KRIEGER, Fungi saxon. n. 1997).

2. *Orbilia botulispora* v. Höhnel, Fragm. z. Mykol. Sitzb. k. Ak. d. Wiss. Wien, Bd. CXVI, Abt. I (1907) pag. 131, — Ascomatibus gregariis, late adnatis, depresso-spicatis, margine revolutis, vitellinis, siccis flavo-ochraceis, aquoso-carnis, 0,3-1,4 mm. latis et usque ad 400 μ . crassis; hypothecio bistratioso; excipulo parenchymatico ad marginem cellulis minutis prismaticis constituto; paraphysibus tenuisimis, supra usque ad 3 μ . globoso-incrassatis, flavis; ascis basi cylindraceo-cuneatis, 30-36 \times 2,5-3, octosporis; sporidiis plerumque monostichis, allantoideis, subcirculariter incurvatis, 2-3 \times 1.

Hab. in ligno fagineo putri prope Rekawinkel Austriae inf.

3. *Orbilia aurantio-rubra* Boud., Icon. mycol. t. III (1906) pl. 464, 574¹ Hist. et Classif. Discomyc. Europe (1907) p. 103. — Pro genere media 0,5-2 mm. lata, intus et extus aurantio-miniata; cupulis primo regularibus, dein plus minusve undulatis, levibus; ascis cylindraceis, ad basim attenuatis, ad apicem truncatis, octosporis, 60-80 \times 5-6; paraphysibus ad apices clavato-capitatis, 5-7 μ . cr., albis, intus guttulatis; sporidiis hyalinis, elongatis, cylindraceis sed varie undulatis et tunc vermicularibus, 15-18 \times 2.

Hab. ad corticem Ulmi, Marne, Gallia.

4. *Orbilia crenulato-lobata* von Höhnel, Ergeb. Bot. Exp. Südbras. 574² 1901, Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. pag. 31. — Ascomatibus superficialibus, sparsis, albo-translucidis, cartilagineis; membranaceo-firmis, 1-3 mm. latis, primum cupulatis dein expansis et margine involutis, levibus; 200 μ . diam., hyphis rugulosis tenuibus, hyalinis 5-6 μ . crass. basi adhaerentibus ceterum glaberrimis, margine processibus confertis, 70-80 μ . alt. pluri-stratosis ex cellulis rotundis 4-5 μ . diam. formatis preeditis; disco 12-16 μ . cr. (immature); ascis circ. 3 μ . cr.; paraphysibus filiformibus, supra inflatis; sporidiis verisimiliter minutis allantoideis; contextu 80 μ . cr., parenchymatico.

Hab. in cortice putri ad flumen Rio Branco prope Conceição São Paulo, Brasilia. — *O. sinuosa* Penz. et Sacc. affinis.

II. *Hyalinia* (Boud.): paraphysibus apice æqualibus.

5. *Orbilia inflatula* Karst. — Syll. VIII, p. 627 — *Hyalinia inflatula* (Karst.) Boud. Disc. p. 104. — var. *Lonicerae* Rehm in Strasser Verh. k. k. zool. bot. Ges. Wien LX (1910) p. 472. — Ascomatibus gregariis,

in ligno denudato sessilibus, primitus globosis dein patellaribus, margine acuto tenuissimo cinctis, 0,2-0,7 mm. diam., intus glabris, dilute hyalino-lutescentibus, disco demum pallidiore, excipulo prosenchymerico, hyalino, subgelatinoso, hyphis 4 μ . latis, siccis subconvolutis; ascis clavatis, apice rotundatis, 20-25 \times 4, octosporis, jodo immutatis; sporidiis oblongis, utrinque obtusis, subcurvatis, 1-cellularibus, utrinque 1-guttulatis, hyalinis, 5-7 \times 1-1,2; paraphysibus filiformibus 2 μ . cr. haud clavatis, hyalinis.

Hab. in ramo decorticato Lonicerae, Ybbsitz Austria inf. (P. LAMBERT).

6. **Orbilia nostra** (Rehm) Sacc. et Trott., *Hyalinia nostra* Rehm, Ann. 5744 Mycol. IV (1908) pag. 117; Ascom. exsicc. fasc. 41, n. 1754. — Ascomatibus dispersis, sessilibus, globulosis, dein patellaribus, tenuissime marginatis, hyalino-flavidulis v. subaureis, extus glabris, 100-150 μ . diam., excipulo tenuissimo parenchymatico contexto, membranaceis, siccis vix visibilibus; ascis clavatis, versus apicem subacutatis incrassatisque, 45-50 \times 12, octosporis, J+; sporidiis oblongis, utrinque rotundatis, rectis, subconstricto-didymis, unilocularibus, utrinque guttam oleosam v. guttulas plurimas continentibus, an demum bilocularibus; hyalinis, 10-12 \times 4, distichis; paraphysibus perpaucis, filiformibus, obtusis, hyalinis, 3 μ . cr.

Hab. ad acus recenter delapsos Laricis japonicae in horto Neufriedenheim Monacensi Bavariae (REHM).

7. **Orbilia sericea** P. Henn., Hedw. (1905) XLV, p. 29. — Ascomata 5745 tibus dense gregariis, primo clausis, dein applanatis subdiscoideis vix marginatis, undulatis, sessilibus, membranaceo-subgelatinosis, levibus, pallidis v. subisabellinis, sericeis 300-350 μ . c. cr.; ascis cylindraceo-clavatis, obtusis, 8-sporis, 18-22 \times 3; paraphysibus filiformibus, hyalinis, c. 0,5 μ . cr.; sporidiis subdistichis v. oblique monostichis, fusoideis, hyalinis, continuis, 4-5 \times 0,5.

Hab. in ligno putri, Michailowskoe Rossiae.

8. **Orbilia breviasca** P. Henn., Verh. Bot. Ver. Prov. Brandenb. L 5746 (1908) p. 132. — Ascomatibus lignicolis, superficialibus, sparsis, primo clausis, dein angulato-discoideis, marginatis, gelatinosis, flavo-aurantiacis, 1-1,5 mm. diam., disco concolori, levi; ascis breve clavatis, apice obtuse applanatis, octosporis, 20-25 \times 3-3,5, paraphysibus filiformibus, hyalinis, c. 0,5 μ . cr., apice haud incrassatis; sporidiis subdistichis v. subtristichis, cylindraceis, subfusoideis, utrinque obtusis v. subacutiusculis, rectis, hyalinis, 6-7 \times 0,5.

Hab. in ligno putri prope Tamsel, Germania (VOGEL). — O.

luteo-rubellæ (Nyl.) Karst. affinis, a qua differt ascis brevioribus apice non incrassatis, paraphysibus sporidiisque angustioribus etc.

9. *Orbilia crenato-marginata* (v. Höhn.) Sacc. et Trott., *Hyalinia crenato-marginata* v. Höhn., Fragm. zur Mykol., III, Sitzb. k. Ak. d. Wiss. Wien Bd. CXVI, Abt. I (1907) p. 132. — Ascomatibus superficialibus, gregariis, tenuissimis, depresso-globosis, subhyalinis, flavidobrunneis, siccis pallide roseis, rotundatis, 320-630 μ . latis, basi lata insidentibus; excipulo tenui parenchymatico, cellulis 8-12 μ . latis ad marginem minoribus; margine denticulato-piloso; ascis octosporis, clavatis, sessilibus, 25 \times 3-4; paraphysibus simplicibus filiformibus, 1-2 μ . crassis, apice depresso capitellatis; sporidiis hyalinis, breviter filiformibus, vermiformibus, subclavulatis, 6-8 \times 0,5-1.

Hab. ad truncos putres, Wienerwald Austriae inf.

10. *Orbilia albo-marginata* Rehm, Österr. Bot. Ztschr. LVI (1906) 5748 p. 344 (Nomen nudum).

Hab. in caulinis emortuis Aconiti, Schrofenpass, Tirolia Austria.

PTEROMYCES B. R. S. in Saccardo, Not. Myc. VI, Ann. Myc. III (1905) p. 507 (Etym. *pteron* ala et *mycles*). — Ascomata perexigua, depresso-globulosa, tenuissime carnosula, pallide colorata, supra circulariter dehiscentia et discum (nucleum?) pallidiorem ostendentia; excipuli contextu tenuissime pseudoparenchymatico, margine subintegro non reflexo nec vere distincto. Ascii e basi fasciculati, clavulati, subsessiles, octospori, paraphysibus bacillaribus cincti. Sporidia ovoidea, continua, hyalina, minuta. — Genus pulchellum *Orbiliae* et *Pezizellæ* subaffine sed ascomate diu (ut videtur) urceolato et margine proprio carente nec non habitatione peculiari statim dignoscitur. Inter Bulgariaceas prope *Orbiliam* interim locandum.

1. *Pteromyces ambiguus* B. R. S. in Saccardo, l. c. p. 508. — Ascomatibus dense gregariis v. confertis, depresso-globosis, perexiguis, 70-100 μ . diam., e fulvescenti dilute roseis, glabris, sessilibus, initio subcuticularibus, disco pallidiore, contextu laxiuscula et tenerime celluloso, fulvo-rubescenti; ascis ex obovoideo demum clavulatis, basi breve tenuatis subsessilibus, apice rotundatis integris non foveolatis, 18-22 \times 7-8, octosporis; paraphysibus bacillaribus, sursum tenuiter clavulato-incrassatis, saepe curvatis ascum paullo superantibus; sporidiis distichie, ovoideis, hyalinis, intus farctis, 3-4 \times 1,5-2, extra ascos 6 \times 3.

Hab. sub cuticula v. membranula caulis pennarum subputrescentium Phasiani, La Panne, Furnes, Martio 1904 (MARIA ROUSSEAU). — Socia adsunt *Phoma pterophila* (Cfr. infra) et *Fusarium gallinaceum* Cooke et Harkn.

GLŒOCALYX Massee — Syll. XVIII, p. 132.

1. **Glœocalyx rufa** (Schw.) Sacc. — Syll. VIII, p. 638 (*Bulgaria*) — 5750
var. *magna* Peck, N. York State Mus. Bull. n. 105 (1905) p. 31.
— Ascomatibus majusculis, 7-10 mm. diam., sessilibus, subplanis, subinde irregularibus v. undulatis, basi lata tempore udo strato gelatinoso albido inserta, disco ochraceo-brunneo; sporidiis hyalinis, 20-30 × 12.

Hab. ad terram inter folia Abietis et muscos North Elba Amer. bor. — Excipulum extus venoso-subreticulatum ut in typo. Ob sporidia hyalina a gen. *Bulgaria* desciscit.

HÆMATOMYCES B. et Br. — Syll. VIII p. 633, X p. 40.

1. **Hæmatomyces eximus** Rick, Broteria V (1906) p. 28. — Asco-5751
mate gelatinoso, cerebriformi et tremelloideo, prorumpente, convolutionibus crassis, firmis, globoso, 5 cm. diam., castaneo; ascis cylindraceis, 130 × 6-8; sporidiis ellipsoideis, 6-8 µ. longis, 4 µ. cr., biguttulatis, apiculatis v. etiam apice truncatis, viridulo-hyalinis, dein olivascentibus, biserialibus, unilocularibus; paraphysibus filiformibus, apice paulatim minute incrassato, hyalinis, versus pedem viridulo-olivaceis.

Hab. ad truncum putridum, Rio Grande do Sul Brasilæ. — *Hæmat. spadiceo* affinis.

Sect. 2. Phæosporæ.

BULGARIA Fr. — Syll. VIII p. 636, X p. 41, XIV p. 804, XVI p. 770, XVIII p. 140.

1. **Bulgaria pusilla** Syd., Ann. Mycol. VIII (1910) pag. 40. — Ple-5752
rumque sparsa, e cortice erumpens, breve crasseque stipitata, stipe ca. 1-2 mm. alto et crasso, primitus obovoidea et clausa, dein aperta dilatato-turbinata, orbicularis, glabriuscula, atra, 2-5 mm. diam.; ascis anguste clavatis, basi stipitiformi-attenuatis, 70-110 × 8-11, octosporis; sporidiis oblique monostichis, oblongis, utrinque

leniter attenuatis, continuis, primo hyalinis, dein olivaceo-brunneis, 17-20 \times 5-6 $\frac{1}{2}$; paraphysibus numerosis, hyalinis, filiformibus.

Hab. ad corticem, Pauai 2100 m. alt., provincia Benguet, Luzon, ins. Philipp. (R. C. Mc GREGOR et E. D. MEERILL). — *Bulgariae turbinatæ* affinis sed asci et sporidia multo angustiora.

BULGARIELLA Karst. — Syll. VIII p. 638, XVIII p. 131.

1. **Bulgariella argentinensis** Speg., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) p. 454. — Ascomatibus parvis, sessilibus, e turbinato patellaribus, atro-vinosis, subiculo parcissimo radiante insidentibus, 2-5 mm. diam., eximie marginatis, hyphis radiantibus fuligineis pellucidis, 100-1500 \times 10-15, parce ramulosis septulatis basi cinctis, disco vinoso, udis subgelatinosis, siccis subcorneis; ascis linearibus paraphysatis apice subtruncato-rotundatis, deorsum tenuato-pedicellatis 75-80 \times 5, octosporis; sporidiis ellipsoideis, fuligineis, grosse 2-guttulatis, minutis, 8 \times 4, recte monostichis, utrinque obtusissimis, saepe medio levissime coaretatis.

Hab. ad trunco emarcidos mucidos in silvis secus Rio Colorado, prov. Jujuy, Argentina.

VOELTZKOWIELLA P. Henn. in Voeltzkow Reise Ostafrika III (1908)

pag. 31 (Etym. a cl. prof. ALFR. VOELTZKOW, viatore Afric.). — Mycelium gelatinoso-membranaceum, effusum ex hyphis coloratis septatis consistens; ascomata gelatinoso-carnosa, cupulato-discoidea, sessilia superficialia; ascis cylindraceo-clavati, octospori; paraphyses filiformes, ramosæ, coloratae; sporidia ellipsoidea, continua, colorata. — Gen. *Sarcosomati* et *Bulgariae* affine sed differt mycelio gelatinoso et ascomatibus superficialibus.

1. **Voeltzkowiella madagascariensis** P. Henn., l. c. pag. 31, tab. III, 5754 fig. 26. — Mycelio membranaceo-gelatinoso effuso, ex hyphis septatis, ramosis, brunneis, c. 4-6 μ . cr. consistente, conidiis fuscis, ovoideis v. ellipsoideis, 6-7 \times 4-5; ascomatibus superficialibus subgelatinosis, cupulato-planis, marginatis, extus pallido-fuscescentibus, levibus, disco plano, fusco-brunneo, c. 2 cm. longo, 1 cm. lato, 2 mm. cr., carne pallida gelatinosa; ascis clavatis, vertice obtuso-rotundatis, octosporis, 100-140 \times 15-20; paraphysibus filiformibus hyalinis 3,5-4 μ . cr., ad apicem ramosis, septatis, fusco-brunneis, intus nubilosis, 8-15 \times 7-8.

Hab. ad ramos arborum, Andranohinaly Madagascar.

paraphysisibus filiformibus, 1 μ ., apice bifurcatis et globulosis 4 μ . crassis, epithecium crassum sanguineum formantibus; hypothecio hyalino.

Hab. ad ligna Coniferarum, Sumner Wash. Amer. bor. (E. T. et S. A. HARPER). — Ob excipulum tantum basilare ad *Agyrium* vergit.

DIDYMOCORYNE Sacc. et Trott. (Etym. *didymos* duplex et *Coryne* ob sporidia bilocularia). — A gen. *Coryne* differt sporidiis æque hyalinis sed tantum bilocularibus. Ad hoc genus quoque ducendæ sunt: *Didymocoryne striata* (E. et E.) — Syll. VIII, p. 643 — *D. solitaria* (Rehm) — Syll. X, p. 43 — *D. pallidula* (Rehm) — Syll. l. c. p. 44.

1. **Didymocoryne michailowskoensis** (P. Henn.) Sacc. et Trott, *Coryne michailowskoensis* P. Henn. Hedw. (1905) XLV, p. 30. — Ascomatibus sparsis v. subgregariis, stipitatis, calyciformi-infundibuliformibus, subgelatinosis sicco corneis, olivaceis, extus flavo-viridulis pulverulentis, margine sublobatis v. undulatis, c. 2-3 mm. diam., disco olivaceo, flavo-pruinoso, dein rimoso, stipitibus c. 1-4 mm. longis, 1 mm. cr., concoloribus, saepe confluentibus; ascis clavatis, apice attenuatis obtusiusculis, 8-sporis, 80-100 \times 5; paraphysisibus filiformibus, hyalinis, guttulatis, c. 2 μ . cr., apice paullo in-crassatis; sporidiis oblongo-cylindraceis, rectis v. curvulis, utrinque obtusis, 2-guttulatis, dein medio 1-septatis, hyalinis, 8-13 \times 2,5-3.

Hab. in ligno putri Michailowskoe Rossiae (J. KONOVALOFF).

Sect. 4. Phragmosporæ.

CORYNE Tul. — Syll. VIII p. 641, X p. 43, XI p. 427, XVI p. 773, XVIII p. 143.

1. **Coryne gelatinosa** (Ell. et Mart.) Rehm, Ann. Mycol. V (1907) 5763 p. 518. Ita vocanda *Orbilia gelatinosa* (Ell. et Mart.) Sacc. Syll. VIII, p. 624, Cfr. Ell. et Martin sub *Mollisia* (Amer. Nat. 1883, p. 1283). — Ascomatibus in mycelio orbiculari *Meliolæ* hyphis tenerrimis hyalinis ramosis obtecto indeque fere sericee cinerello dispersis, sessilibus, primitus globulosis, clausis, dein disco urceolato, demum patellari, tenuiter marginato, versus basim stipitiformiter elongatis, glabris, 0,3-0,5 mm. diam., hyalinis vel dilutissime rosaceis, gelatinosis, siccis rubidulis, fere corneis, excipulo ex

hyphis gelatinosis, candidis, septatis, implexis contexto, crasso; ascis clavatis, apice rotundatis, $50 \times 12-15$, 8-sporis, jodi ope nulla; sporidiis fusiformibus, transverse 3-septatis, haud constrictis, hyalinis, $12-15 \times 5$, distichis; paraphysibus gelatinosis, filiformibus, septatis, $3-3,5 \mu$. cr., ad apicem dilatatae 5μ . cr., curvulis.

Hab. ad folia viva *Perseæ palustris*, Green Cove Springs, Florida (MARTIN). — *Genuina Coryne* nec *Orbilia*.

2. *Coryne foliacea* Bres. in Strasser III, Nachir. Pilz. Sonntagb. in 5764 Verhandl. zool. bot. Gesell. Wien (1905) p. 611. — Ascomatibus subcartilagineo-gelatinosis, e basi communi oriundis et cæspitose congregatis e subturbinato subcyathoideis v. foliaceis, demum late expansis, carneo-ochraceis, extus subrugulosis, usque ad 3 cm. latit; hymenio pallide carneo, undulato-gyroso; ascis subcylindraceis, basi tenuato-stipitatis, $100-110 \times 8-10$, jodo poro vix cærule-scentibus, paraphysibus $2,5 \mu$. cr., apice haud incrassatis interdum conidiophoris; sporidiis ellipsoideis, biguttulatis, hyalinis, $7-10 \times 4-4,5$; conidiis vix a sporidiis diversis.

Hab. ad truncos *Aceris Pseudoplatani* in Mt. Sancto, Sonntagberg Austriae. — *Habitus Tremellæ foliacea*, sed fabrica interior omnino diversa.

3. *Coryne albido-aurantiaca* Starb. (1899) — Syll. XVI, p. 774 — 5765 Hujus speciei videtur status nondum maturus *Ombrophila gera-lensis* P. Henn. (1899) — Syll. XVI, p. 766.

CHLOROSPLENIELLA Sacc. — Syll. VIII p. 645, XVI p. 774.

1. *Chlorosplenella collematoides* Rehm, Broteria V (1906) p. 227. 5766 — Ascomatibus gregariis, sessilibus, primitus globoso-clausis, dein disco orbiculari, convexiusculo, haud conspicue marginato, dilute fuscidulo, c. 400μ . diam., excipulo versus basim coarctato, brun-neo, glabro, ad basim pseudoparenchymatice contextu, siccis nigro-fuscis, disco tenuissime marginato, gelatinosis; ascis clavatis, apice rotundatis, $60-65 \times 8-9$, J +, octosporis; sporidiis fusoideis, modice septatis, haud constrictis nec guttatis, rectis, interdum subcurva-tis, 10×3 , hyalinis, strato mucoso tenuissimo obductis, distichis; paraphysibus, parcis, filiformibus, hyalinis, $1,5 \mu$. cr.

Hab. ad lignum putridum arboris frondosæ, Brasilia (RICK).

Sect. 5. Dictyosporæ.

HÆMATOMYXA Sacc. — Syll. VIII p. 633, X p. 40.

1. **Hæmatomyxa bambusina** Raciborski, Bull. Ac. Sc. Cracovie (1909) 5767 p. 371. — Hypothallo nullo v. subnullo; ascomatibus nigris, depresso 1-3 mm. latis, 1-1,5 mm. altis confluendo 5-6 angulosis, raro rotundatis, extus nigro-carbonaceis, intus albis, gelatinosis, hygroscopicis, pseudoparenchymaticis et prosenchymaticis, demum superficie hinc inde v. undique fertilibus; ascis pulvinatim erumpentibus, elongato-ovoideis, 90-98 \times 20-24, apice rotundatis, octosporis; sporidiis ovoideis rotundato-attenuatis, levibus, hyalinis, 27-30 \times 13-15, muriformi-multilocularibus, medio constrictulis, teneri tunicatis.

Hab. ad culmos *Bambusæ* sp., Buitenzorg Java.

Sect. 6. Scolecosporæ.

HOLWAYA Sacc. — Syll. III p. 646, XVI p. 1115.

1. **Holwaya pusilla** Rehm, Ann. Mycol. IV (1906) p. 337. — Asco-5768 matibus in ligno superficialiter fusco-nigritulo dispersis, sessilibus, primitus subgloboso-clausis, dein patellaribus, tenuissime marginatis, 300 μ . altis et latis, in stipitem brevissimum c. 145 μ . lat. subcylindraceum elongatis, glabris, atris, siccis subverruculosis; excipulo flavo-fusco, hyphis laxe intricatis contexto, subgelatinoso, crasso; ascis cylindraceis, apice rotundatis, 120-130 \times 8-10, octosporis, jodi ope nulla; sporidiis cylindraceo-vermicularibus, apice superiore obtusis, inferiore acutatis, subcurvatis, 1-5-septatis, quaque cellula magniguttata, haud constrictis, hyalinis, 35-38 \times 3-3,5, distichis; paraphysibus filiformibus, 1 μ . cr., ad apicem dichotomis et fuscis, epithecium crassum formantibus.

Hab. ad lignum putridum in silvis, Lyndonville N. Y., Amer. bor. (C. E. FAIRMAN). — *Holwayæ giganteæ* proxima sed multo minor.

Fam. 8. Stictidaceæ Fr.

Sect. 1. Hyalosporæ.

PROPOLIS Fr. — Syll. VIII p. 648, X p. 44, XIV p. 806.

1. **Propolis pirina** Rehm, Contr. mycol. Hung. (Növ. Közl. 1905) p. 3, 5769

Extr. — Ascomatibus gregariis, sub epidermide innatis, eamque hemisphærice protuberantibus, demum laciniis 3-4 disrumpentibus, primitus globoso-clausis, dein disco orbiculari, tenuiter irregulariterque marginato, explanato, hyalino, 0,5 mm. diam., excipulo membranaceo, tenuissimo, fuseidulo, parenchymatico; ascis cylindraceis, apice rotundatis, 120-150 \times 12-15, octosporis, jodi ope nulla; sporidiis fusoideo-ellipsoideis, crasse tunicatis, 1-cellularibus, hyalinis, levibus 18-20 \times 8-9, 1-stichis; paraphysibus filiformibus, 2 μ . cr., ad apicem dilutissime flavidulis.

Hab. in cortice Piri Mali, Berencsfalu, prope Selmeczbánya, Hungariæ (KMET). — A genere *Propolis* paraphysibus filiformibus, ab *Ocellaria* item paraphysibus haud ramosis neque epithecium formantibus, ascis Jodi ope diversa, tamen *Propoli fagineæ* structura similis, etsi ascomatibus orbicularibus sporarumque forma dissimilis.

2. **Propolis tetraspora** Sacc. apud Mouton, in Bull. Soc. bot. Belg. 5770

(1887) p. 2, t. I, f. 11, extr. — Ascomatibus dense sparsis, primo epidermide denigrata tectis, dein ea lacerata circumdati e discoideo oblongis 0,5-1 mm. long., rufo-succineis, carnosulis, immarginatis, planiusculis; ascis subcylindricis in pedicellum longiusculum protractis, tetrasporis, 80-90 \times 10-12; paraphysibus septatis, ramosis, ascis æquantibus; sporidiis monostichis ellipsoideis, inæquilateris, quandoque subreniformibus, 2-guttulatis, granulosisque, hyalinis, 14-20 \times 8-10.

Hab. in caulibus siccis Solidaginis Virgæ-aureæ, Chaudfontaine, Dolembreux pr. Liége Belgii. — Ab affinibus ascis tetrasporis potissimum distincta.

NÆVIA Fr. — Syll. VIII p. 658, X p. 45, XI p. 660, XI p. 631, XVI p. 1065, XVIII p. 594.

1. **Nævia pezizelloides** Rehm, Ascom. exsicc. n. 1657 (1906), Ann. 5771

Mycol. IV (1906) p. 405. — Ascomatibus dispersis, primitus sub epidermide innatis eamque perforantibus, demum sessilibus, patellariibus, disco orbiculari plano tenuiter marginato, excipulo glabro, versus basim subangustato, prosenchyматicæ flavidule contexto, hyalino-flavidulis, c. 300 μ . diam., siccis urceolatis, interdum fuscidule marginatis; ascis clavatis, apice rotundatis, plerumque subcurvatis, 80-85 \times 12-14, octosporis, J-; sporidiis oblongo-clavatis, utrinque rotundatis, unilocularibus, guttulas oleosas includentes, hyalinis, 12-14 \times 4,5-5, distichis; paraphysibus filiformibus, septatis, 2,5 μ . cr., versus apicem 2-3-tomis, apice 4 μ . lat., ibique interdum flavidulis.

Hab. ad folia caulesque putrescentes Alchemillæ pubescantis juxta glaciem Alpeiner Gletscher Stubai Tirolie (REHM).

2. **Nævia muscarina** Rehm, Contr. mycol. Hung. (Növ. Közl. 1905) 5772 p. 3, Extr. — Ascomatibus sparsis, primitus innatis, dein per epidermidem longitudinaliter fissam prorumpentibus, patellariibus, orbicularibus, tenuissime marginatis, fusco-nigritulis, 0,3-0,4 mm. d., excipulo membranaceo fuscidulo, parenchymatico; ascis clavatis, apice rotundatis, 25-30 \times 5-6, octosporis; poro jodi ope immutato; sporidiis clavatis, 1-cellularibus, hyalinis, 5-6 \times 2,5, distichis; paraphysibus filiformibus, septatis, hyalinis, apice obtusis, 2-3 μ . cr.
- Hab.* in caule emortuo Muscari comosi, Berencesfalu, prope Selmeczbánya, Hungaria (KMET). — Sporidiorum minutie a descriptis *Næviae* speciebus diversa.
3. **Nævia seriata** (Lib.) Rehm — Syll. VIII, p. 663 — var. **comedens** 5773 Rehm, Ann. Myc. III (1905) p. 414 et Ascom. Exsicc. n. 1610. — Dignoscitur matricis foliis initio viridibus denique circa ascomata decoloratis et postremo necatis; sporidiis paullo angustioribus, nempe 8-9 \times 1,5-2.

Hab. in foliis Caricis sp. inter Gotzing et Thalham Bavariae superioris.

Sect. 2. Phragmosporæ.

CRYPTODISCUS Corda — Syll. VIII p. 669, XIV p. 809, XVI p. 778.

1. **Cryptodiscus albo-marginatus** Kirschst., Verh. Bot. Ver. Brandb. 5774 XLVIII (1906) pag. 39. — Ascomatibus cortice immersis, hemisphaerico-prominentibus 0,5 mm. diam. poro albo-marginato cir-

culari apertis, disco griseolo; excipulo basi brunneolo, supra hyalino, ex hyphis filiformibus septatis constituto; ascis clavatis, supra rotundatis, sessilibus, tenuibus, octosporis, $70-80 \times 16-20$; sporidiis irregulariter plures seriatis, hyalinis, clavatis, rectis v. curvulis, plerumque 8-septatis, leniter constrictulis, guttulis evanidis, farctis, $32-46 \times 5-6$; paraphysibus filiformibus, hyalinis, ascos longitudine æquantibus, supra non incrassatis, septatis, 2μ . circ. cr.

Hab. in cortice dejecto Pruni Cerasi, Wegrand pr. Gross-Behnitz, Germania.

2. **Cryptodiscus volvatus** v. Höhnel, Ergeb. Bot. Exp. Südbras. 1901, 5775 Denk. k. Ak. d. Wiss. Wien, Bd. LXVIII (1907) Extr. p. 30.
— Ascomatibus rotundatis, $250-400 \mu$. latis, immersis margine incrassatis lobato-laciniatis, sparsis, quandoque binis confluentibus; acie sterili 80μ . lata, 55μ . cr.; hypothecio plectenchymatico, pallido $40-50 \mu$. cr.; ascis clavatis $75 \times 5-6$ paraphysibus filiformibus obsitis, octosporis; sporidiis mono- v. distichis, hyalinis, elongato-ellipsoideis, utrinque obtusulis, rectis, 10×3 . J +.

Hab. in fragmento corticis, prope Butantan, Sao Paulo Brasilie. — A Cr. *Leprieurii* (Mont.) magnitudine omnium partium minore distinctus dicitur, sed de numero septorum sporarum auctor silet!

3. **Cryptodiscus phaneromycooides** Rehm, Ascomyc. Exsicc. fasc. 43, 5776 n. 1802 et Ann. Mycol. VII (1909) p. 134. — Ascomatibus gregariis, stipiti haud maculato primitus innatis, globoso-clausis, epidermidem obtegentem conoideo-protrudentibus, stellatim erumpentibus, ab iisque laciniis erectis coronatis discum orbicularem, ex albido roseolum, tenuissime marginatum denudantibus, $0,5-1$ mm. diam., ceraceis, excipulo parenchymatice contexto, tenui hyalino, disco sicco albide cinerello; ascis clavatis, apice rotundatis, $70-80 \times 10-12$, 8-sporis, totis jodo cæruleo tinctis; sporidiis clavato-elongatis, rectis, transverse 7-septatis, hyalinis, $18-24 \times 3$, 2-3-stichis; paraphysibus filiformibus, 2μ . cr., versus apicem subramosum $2,5 \mu$. cr., hyalinis.

Hab. ad stipitem Filicis cuiusdam, Sao Leopoldo, Rio Grande do Sul Brasiliæ (THEISSEN).

PHRAGMONÆVIA Rehm — Syll. VIII p. 674, XIV p. 809, XVI p. 779, XVIII p. 148.

1. **Phragmonævia lignicola** Vouaux, Bull. Soc. Mycol. Fr. (1910) p. 154. 5777
— Ascomatibus in series longitudinales dispositis in macula albe-

scente ligni gregariis, primum hemisphæricis innatisque, postea superficiem ligni findentibus discoque emergentibus, tum plerumque in longitudinem ligni elongatis, atque utrinque attenuatis et acutiusculis, 0,5-1 mm. long., nigris, disco ovali, margine tenui; ascis cylindraceis estipitatis, 100 \times 10, octosporis; sporidiis uniseriatis, hyalinis, ellipsoideis, uniseptatis constrictisque, loculo inferiori tenuiori sed vel majori vel minori, 15-18 \times 5-6, eguttulatis; paraphysibus filiformibus, paucis, ascis paullo longioribus; Jodi ope nulla.

Hab. in ligno vetusto ignoto, Numéa Nova-Caledonia (CACOT).
Phr. hysterioïdi (Desm.) Rehm affinis, sed differt forma et magnitudine sporidiorum.

XYLOGRAMMA Wallr. — Syll. VIII p. 677, XI p. 429, XIV p. 809, XVIII p. 149.

1. **Xylogramma macrosporum** Kirschst., Verh. Bot. Ver. Brandenb. 5778 XLVIII (1906) p. 40. — Ascomatibus in maculis pallescentibus vel rubidis parce gregariis, primum immersis, dein elongato- vel rotundato-prominentibus, disco pallide brunneo sed extus et margine obscuriore, usque ad 1 mm. long., ceraceis; ascis clavatis, basi in pedicellum tenuatis, supra rotundatis incrassatisque, octosporis, 110-130 \times 12-16; sporidiis basi 1- supra 2- v. 3-stichis, hyalinis, plerumque elongato-ellipsoideis v. subcylindraceis, sæpe irregularibus, rectis v. curvulis, 4-6- plerumque 5-septatis, ibique leniter constrictulis, raro imperfecte longitudinaliter uniseptatis, 25-35 \times 6-7; paraphysibus 2-3 μ . cr., hyalinis, filiformibus, ramosis, septatis, sursum sæpe incurvatis et epithecium efformantibus, rotundatis et quandoque parum incrassatis.

Hab. in caulis putrescentibus Malvæ Alceæ, Gross-Behnitzer Hasellake et Artemisiæ vulgaris, prope Gross-Behnitz, Germania. — *X. caulincola* (Fuck.) affine sed sporidiis majoribus et pluri-septatis distinctum.

2. **Xylogramma nigerrimum** (Ell. et Ev.) Rehm, in Ann. mycol. V (1907) p. 518, *Briardia nigerrima* Ell. et Ev., Bull. South. Calif. Ac. of Sc. IV (1905) p. 62. — Ascomatibus gregariis, 1-4 mm. long., 1 mm. lat., nigris, inter fibras ligni intemperie dealbati erumpentibus; ascis primum subglobosis dein obovato-oblongis, 40 \times 12-15, octosporis; sporidiis irregulariter confertis, oblongo-clavatis, hyalinis, dein brunneis, guttulatis, 8-12 \times 3-4, continuis; paraphysibus supra ramosis, et epithecium nigrum formantibus

apiceque conidia subglobosa brunnea obsolete muriformi-septata, 6-7 μ . diam., gerentibus.

Hab. in ligno Rhois laurinæ, Catalina Isl. prope litora Californiae inf. (C. F. BAKER).

PHANEROMYCES Speg. et Har. — Syll. VIII, p. 677.

1. **Phaneromyces ? platensis** Speg., Myc. Arg. IV in An. Mus. Buenos Aires (1909) p. 454, fig. 39. — Ascomatibus innato-erumpentibus, parvis, crasse obtuseque albo-marginatis, 1-2 mm. diam., disco minuto, impresso, glaucescente v. subolivascente, pruinuloso; ascis subellipsoideis dense paraphysatis, deorsum cuneatis brevissime noduloso-pedicellatis, 60 \times 18, octosporis, jodo immutatis; paraphysibus filiformibus apice grumoso-coalescentibus; sporidiis clavato-acicularibus, 5-septatis, fasciculatis, arcuatis, deorsum conspicue tenuato-acutis, ad septa non constrictis, hyalinis, circiter 40 \times 7 (ex icon.).

Hab. ad palos Prosopidis Algarobillæ diu intemperiei expositos Los Hornos prope La Plata, Argentina. — Habitus lichenoideus, sed thallus et gonidia nulla.

Sect. 3. Sclecosporæ.

STICTIS Pers. — Syll. VIII p. 647, X p. 44, XI p. 428, XIV p. 806, XVI p. 776, XVIII p. 146.

1. **Stictis chilensis** Speg., Fungi Chilenses (1910) p. 129, cum icon. 5781 — Ascomatibus sparsis, innatis, erumpentibus, ore trigono v. tetragono, laciniis 3-4 revolutis latis ornato donatis, disco plano glauco-cinereo, 0,5-1,5 mm. diam.; ascis cylindraceis breviter crasseque pedicellatis, 90-100 \times 8-9 octosporis, paraphysibus filiformibus apice non v. vix uncinatis obvallatis; sporidiis filiformibus dense minuteque guttulatis, hyalinis, 60-80 \times 1,5-2.

Hab. in foliis coriaceis dejectis siccis Boldoæ, Ætoxici, Bellotæ, Guevinæ etc. prope Talcahuano, Concepcion, Valparaiso, Chile Amer. austr.

2. **Stictis Arctostaphyli** Ferdinandsen et Winge, Botan. Tidsskr. XXVIII (1907) pag. 253, cum icon., Botan. Tidsskr. XXIX (1908) p. 312, *Coccomyces quadratus* (Sch. et Kze.) Karst. var. *'Arctostaphyli'* Rehm (nom. nud.) Ann. Mycol. V (1907) p. 251; *Næmacy-*

clus Penegolensis Rehm, Verh. bot. Ver. Prov. Brandenb. (1908) p. 34. — Ascomatibus hypophyllis, maculis pallidis insidentibus, erumpentibus, lobis 3-5 epidermicis circinatis, 0,5-1 mm. diam., circ. 110 μ . cr.; ascis cylindraceo-clavatis, sessilibus, 75-105 \times 9-10; sporidiis filiformibus, hyalinis, juvenilibus, ut videtur, plasmate quadripartito, spurie 3-septatis, maturis plerumque tortis, guttulatis, deorsum attenuatis, 60-75 \times 1,5-2; paraphysibus numerosis, filiformibus, guttulatis, circ. 1,5 μ . cr., superne 2-3 ramulis instrutis, epithecium debilem formantibus; J-.

Hab. ad folia emortua *Arctostaphyli Uvæ-ursi* pr. Borris Jutlandia.

3. *Stictis valdiviensis* Speg., Fungi Chilenses (1910) p. 130. — A. 5783 scomatibus gregariis innatis, erumpentibus, ore rotundo margine elevatulo minute denticulato candido cinctis, disco carneo infosso, 0,5-1 mm. diam.; ascis linearibus, dense tenuiterque paraphysatis, breviter attenuato-pedicellatis, 150-160 \times 6; sporidiis acicularibus 9-15-septatis, ad septum medium constrictis, hyalinis, 45-55 \times 2-2,5.

Hab. in pedunculis siccis subputrescentibus *Lobeliae Tupæ* prope Ciudad de Valdivia Chile Amer. austr.

4. *Stictis Cydoniæ* Schulz. v. Mügg. in Verhandl. zool.-bot. Gesell. Wien (1871) p. 1250, t. XIII, f. 30. — Ascomatibus cortice innatis demum cortice secedente liberis, initio urceolatis, clausis, mox hiascentibus, excipulo nigricante præditis, 115-140 μ . diam.; disco plano pallide brunneo, nucleo candido; paraphysibus dense stipatis, filiformibus, apice gemmulis globulosis, brunneis, 2 μ . diam. terminatis; ascis non visis.

Hab. in ramulis corticatis et demum decorticatis *Cydoniæ vulgaris* in Hungaria. — Species vere dubia.

5. *Stictis friabilis* (Phill. et Pl.) Sacc. et Trav. — Syll. XX, p. 898 5785 — *Peziza friabilis* Phill. et Plowr. in Grevillea IV (1876) p. 121, t. 62, fig. 2. — Sparsa v. gregaria, sessilis, junior globosa, dein hemisphaerica, extus albida, minute pubescens, concava, fragilis; margine fisso, inaequali; ascis cylindraceo-clavatis; sporidiis octonis, filiformibus, 60 \times 1, multiseptatis; paraphysibus gracilibus.

Hab. in ramulis emortuis quercinis inter fibras ligneas in North Wales Britanniae. — Verisimiliter ascomata observata post corticis lapsum.

6. *Stictis fimbriata* Schw. — Syll. VIII, pag. 686 — fm. *silvestris* 5786 P. Henn., Verh. Bot. Ver. Prov. Brandb. XLVII (1905) p. 219. — Ascomatibus sparsis vel gregariis, immersis, convexis, limbo

elevato 5-8 radiato candido furfuraceo cinctis, disco concavo, cinereo-fusco, c. 250-350 μ . diam.; ascis subclavato-fusoideis, apice acutis, octosporis, 70-90 \times 8-10; paraphysibus filiformibus, pluriguttulatis, hyalinis, apice haud incrassatis, 2-3 μ . cr.; sporidiis filiformibus, flexuosis, apice obtusis, inferne subattenuatis, acutiusculis, pluriguttulatis dein 9-12-septatis, hyalino-cyanescentibus, 50-80 \times 2-3.

Hab. in squamis dejectis strobilorum Pini inter Lanke et Utz-dorf Germaniae.

7. *Stictis tropicalis* Speg., Myc. Arg. IV in An. Mus. Buenos Aires 5787 (1909) p. 455. — Verticaliter cylindracea, profunde infossa, ore minutissimo saepius 4-dentato, albido dehiscens, 500-600 μ . alta, 100-150 μ . diam.; ascis linearibus prælongis, apice rotulatis deorsum breviter tenuato-pedicellatis, 200-225 \times 12, paraphysibus tenuissimis obvallatis, octosporis; sporidiis asci longitudine multiseptatis, non tortis, 200 \times 3,5-4, articulis non secedentibus, 7-10 μ . longis, hyalinis.

Hab. ad rhachides foliorum delapsorum Musæ paradisiacæ in hortis, Orán, Argentina.

8. *Stictis bambusella* v. Höhnel, Ergebniß Bot. Exp. Südbras. (1901) 5788 Denk. k. Ak. d. Wiss. Wien LXXXIII (1907) Extr. pag. 30. — Ascomatibus singulis, profunde immersis, rotundatis v. elongatis, circ. 500 μ . long., extus tenuiuer albo-marginatis, disco flavidо pallido; hypothecio 30-40 μ . crasso, pallido, minute parenchymatico; ascis cylindraceis 140-150 \times 7-8, octosporis, paraphysibus filiformibus supra incrassatulis, epithecium indistinctum efformantibus ob-sitis, J +, primum cyaneis dein rubro-vinosis; sporidiis filiformibus, multiseptatis, 70-140 \times 1,7-3,5, articulis 3-6 μ . long. non secedentibus.

Hab. in culmis Bambusæ, ad flumen Rio Pardo in districtu S. Cruz, Sao Paulo Brasiliæ.

SCHIZOXYLON Pers. — Syll. VIII p. 697, X p. 47, XI p. 430, XIV p. 812, XVI p. 782, XVIII p. 152.

1. *Schizoxylon græcum* v. Höhnel, Fragm. z. Myk., Sitzb. k. Ak. d. Wiss. Wien, Bd. CXVI, Abt. I (1907) pag. 638. — Ascomatibus sparsis, primum globoso-immersis, dein rotundato-apertis et discum rubidum v. carneum ostendentibus, 200-1200 μ . latis, 500-600 μ . altis, margine albo, crassiusculo, lobulato præditis; hypothecio hyalino, minute indistincte celluloso-plectenchymatico circ.

60 μ . cr.; excipulo basi 40 μ . cr. saepe oxalati calcici incrustato, tunc 120-130 μ . cr.; ascis paraphysatis, cylindraceis 280-340 \approx 8-12, octosporis; sporidiis filiformibus, septatis, 200-250 \approx 2-2,5, saepe in eodem asco maturo in 2-5 articulos cylindraceos secedentibus. J -.

Hab. in ramulis putrescentibus Oleæ europææ in ins. Corcyra (Corfu) (EGGERTH).

2. **Schizoxylon melanostictum** Spegazz., Myc. Arg. IV in An. Mus. 5790

Buenos Aires (1909) pag. 456. — Minutum, erumpens, nigricans, laxe gregarium, areis albescens in insertum, primo globulosum, 120-150 μ . diam. epidermide velatum, disco melleo, ore rotundo angusto dehiscens; ascis linearibus dense tenuissimeque paraphysatis, apice obtuse rotundatis, breviter minute pedicellatis, 200 \approx 8-10, octosporis; sporidiis ascorum longitudine cito in globulos minutos 1,5-1,7 μ . diam. secedentibus.

Hab. ad ramos emortuos Lippiæ geminatæ, Ensenada pr. La Plata Argentina.

3. **Schizoxylon dermateoides** Rehm, Ann. Mycol. IV (1906) p. 336. 5791

Ascomatibus dispersis, in cortice interiore sessilibus et prorumpentibus, globulosis, clausis, mox pseudopatellaribus, poro minutissimo pertusis, demum patellaribus apertis, disco tenuiter marginato, orbiculari, cinerescente, plano, extus glabris, excipulo crasso parenchymatico, totis pruina alba tectis, 0,5-1,5 mm. diam., ceraceis; ascis cylindraceis, versus apicem subacutatis, 2-4-sporis, 200 \approx 12; sporidiis filiformibus, septatis, asci longitudine, parallele positis, intra ascum cellulis singulis oblongis hyalinis, 7-8 \approx 3-4 μ . secessis; paraphysibus filiformibus, hyalinis, 1,5 μ . cr., ad apicem glutinatis et epithecium crassum, viridi-fuscidulum, jodi ope cœruleo-tinctum formantibus.

Hab. in truncis emortuis Salicis in silvis, Lyndonville N. Y. Amer. bor. (C. E. FAIRMAN). — *Schizoxylon argentino* forte affine.

4. **Schizoxylon gigas** Spegazz., Myc. Arg. IV in Anal. Mus. Buenos Aires (1909) p. 456. 5792

Maximum, superficiale, lenticulari-orbiculari, margine crasso obtuso albo discoque convexo olivaceo præditum, initio glauco-pruinatum serius nudum, 2-3 mm. diam., 1,5 mm. crass., extus fuscum; ascis linearibus apice acutiuscula tenuatis, 250-500 \approx 10; octosporis, breviter crasseque pedicellatis; sporidiis fasciculatis filiformibus mox in articulos cylindraceos rectos, 10-25 μ . longos secedentibus, 2 μ . cr., hyalinis.

Hab. ad lignum putrescens in hortis pr. La Plata Argentina. — Affine *Schiz. aeruginoso* sed sat distinctum.

NEMACYCLUS Fuck. — Syll. VIII p. 701, X p. 47, XI p. 431.

1. **Nemacyclus Lamberti** Rehm in Strasser, Verh. k. k. zool.-bot. Ges. 5793

Wien LX (1910) p. 466. — Ascomatibus gregariis, cortice immutato innatis, globosis, epidermidem sensim semiglobose protuberantibus, dein perforantibus discumque flavidum orbicularem, suburceolatum, epidermidis laciniis 4-5 coronatum denudantibus, 0,5-2 mm. diam.; excipulo membranaceo, parenchymatico, flavidulo; ascis cylindraceo-clavatis, obtusis, 90-95 \times 12, 8-sporis, jodo immutatis; sporidiis acicularibus, apice superiore obtusis, inferiore acutatis, rectis v. subflexuosis, 12-cellularibus, hyalinis, 40-60 \times 3, distichis; paraphysibus filiformibus, apice obtusis, 2-2,5 μ . crassis, hyalinis.

Hab. ad ramulum Lonicerae, Ybbsitz Austria inf. (P. LAMBERT).

2. **Nemacyclus caulinum** v. Höhn., Sitzb. k. Ak. d. Wiss. Wien, CXV, 5794

Abt. I (1906) p. 650. — Ascomatibus gregariis, primum clausis et immersis, dein corticem postremum infuscatum inflantibus et laciniatim erumpentibus nec non discum suborbicularem vel inæqualiter angulosum $1\frac{1}{3}$ - $4\frac{1}{3}$ mm. long. et $1\frac{1}{3}$ - $2\frac{1}{3}$ lat. ostendentibus; ascis clavatis apice obtuso-rotundatis deorsum valde tenuatis, 52 \times 10, octosporis; sporidiis filiformibus parallelis utrinque obtusulis octocellularibus, 8-12-guttulatis, 36-52 \times 1,6-2,5; articulis 4-5 μ . long.; paraphysibus copiosissimis, filiformibus, sursum ramosis et epithecium tenue hyalimum formantibus; hypothecio ex cellulis 3-6 μ . lat., supra hyalino infra flavo; excipulo nullo.

Hab. in caulibus emortuis Urticae dioicae, Wiesenbachtal in Austria inf. — *Nemacyclo* flavo affinis.

Sect. 4. Dictyosporæ.

PLEIOSTICTIS Rehm — Syll. VIII p. 703, XI p. 431.

1. **Pleiostictis illicis** v. Höhn., Fragm. z. Myk. VIII (1909) in Sitzb. 5795

K. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 1227. — Ascomatibus sparsis, immersis, primum elongatis, dein rotundatis, udis 500-800 μ . longis, sed sæpe etiam minoribus, primum immersis clausis, demum supra lobulato- v. irregulariter lacerato-apertis et discum nigrum ostendentibus; stratu hymeniali 120-130 μ . cr., hypothecio tenui, pallido; excipulo basi vix evoluto pallido, ceterum nigro-olivaceo, minute parenchymatico, carbonaceo-coriaceo; ascis

paraphysatis, clavatis, sessilibus vel breviter angustatis, bis-octosporis, 125×16 ; sporidiis ellipsoideo-ovoideis, $16-40 \times 7-15$, septis transversis 4-12 longitudinalibus 1-3, diu hyalinis, demum oliveis.

Hab. in ligno Ilicis Aquifolii, Almbachklamm pr. Berchtesgaden in Bavaria (REHM). — *Pl. propolioidi* Rehm affinis.

Fam. 9. Phacidiaceæ Fr.

Sect. 1. Hyalosporæ.

PSEUDORHYTISMA Juel — Syll. XIV p. 33.

1. *Pseudorhytisma Myrtacearum* Rick, Broteria V (1906) p. 38. — 5796
Stromate orbiculari, amphigeno, atro, saepe pulvinato, rugoso, 3-5 mm. diam., punctato, denique fisso, rhytismoideo, disco albido; ascis usque ad 190×20 , breviter pedicellatis, cylindraceis, apice incrassatis, octosporis; sporidiis uniserialibus, oblongis, sed apicibus abrupte acutatis, $20-30 \times 10-15$, guttulatis, unicellularibus; paraphysibus filiformibus, hyalinis, dilutioribus.

Hab. in foliis Myrtaceæ cujusdam, Rio Grande do Sul Brasilæ. — Socia *Melasmia Myrtacearum* Henn. quæ probabiliter statum pyrenidicum sistit.

PHACIDIUM Fr. — Syll. VIII p. 709, X p. 48, XI p. 431, XIV p. 813, XVI p. 783, XVIII p. 156.

1. *Phacidium Aquifolii* (DC.) Schmidt et Kunze, Mykol. Hefte I, p. 34, 5797 t. II, fig. 13, Rehm Discom. p. 68, *Xyloma Aquifolii* DC. Mém. Mus. III, p. 324, t. 3. — Ascomatibus gregariis, innatis, foliorum epidermidem griseam dein nigrantem bullatim elevantibus, demum vertice in 4 lacinias æquales hiascentibus et discum rotundum pallidum ostendentibus, 0,5 mm. diam.; ascis clavatis, apice obtuse acutatis jodoque tinctis, octosporis, $75-90 \times 18-20$; sporidiis ex oblongo ovoideis v. subfusoideis, continuis, eguttatis, hyalinis, $17-20 \times 6-8$, distichis; paraphysibus tenuibus apice ramulosis et subincrassatis brunneolis.

Hab. in pag. super. foliorum Ilicis Aquifolii in Gallia, Germania, Italia.

2. *Phacidium Marantaceæ* P. Henn., in Flore du Bas- et Moy-Con- 5798

go, Ann. Mus. du Congo, v. II, fasc. II (1907) pag. 100. — Ascomatibus innato-superficialibus, gregarie sparsis, nervos subsequentibus, carbonaceo-atris, rotundato-pulvinatis, substellate v. longitudinaliter rimosis, 1-2 mm. diam.; ascis clavatis (plerumque immaturis) 8-sporis, 80-90 \times 13-18; sporidiis subdistichis, continuis, hyalinis, 12-18 \times 5-6.

Hab. in foliis Marantaceæ, Kisantu Congo, Africa trop. (VANDERYST).

3. **Phacidium diminuens** Karst. — Syll. VIII, p. 721 — var. **tetrasporum** Rehm, in Jaap Beitr. Pilzfl. d. Schw., Ann. Myc. v. V (1907) p. 251 (*Nævæa*). — Distinguitur ascis tetrasporis.

Hab. in culmis vetustis Eriophori (Trichospori) cæspitosi supra Grimselhospize Helvetiæ.

4. **Phacidium coopertum** (Desm.) von Höhn, Österr. Bot. Ztschr. LVIII (1907) p. 324. — Ita vocanda *Sphaeria cooperta* Desm. seu *Læstadia cooperta* (Desm.) Sacc. Syll. I, p. 426, teste v. Höhn. l. c.

PSEUDOPEZIZA Fuck. — Syll. VIII p. 723, XI p. 431, XIV p. 813, XVI p. 784, XVIII p. 156.

1. **Pseudopeziza repanda** (Fr.) Karst. — Syll. VIII, p. 727 — var. **thalictri** P. Henn., Engl. Jahrb. XXXVII (1905) p. 162. (*Phacid. repand.*). — Maculis effusis, fuscis, ascomatibus epiphyllis sparsis, subhæmisphæricis, atris, lobato-rimosis, c. 300-400 μ . diam.; ascis clavatis, obtusis, octosporis, 50-55 \times 7; sporidiis distichis, oblonge ellipsoideis, rectis v. curvulis, obtusis, 2-guttulatis, 7-10 \times 3-3,5, hyalinis.

Hab. in foliis vivis Thalictri simplicis, Tokyo Horjoushi, Japonia (MIYABE). — A typo differt sporidiis latioribus, non clavatis sed ellipsoideis.

2. **Pseudopeziza Ribis** Rehm apud Klebahn, Centralbl. f. Bakt., II Abt., XV (1905) p. 336. — Ascomatibus erumpentibus breviter et crasse pedicellatis supra applanatis et circ. 230 μ . latis; ascis clavatis 80-100 \times 18-20; sporidiis ovoideis 12-17 \times 7-8; paraphysibus filiformibus, ramosis, apice vix incrassatis.

Hab. in foliis siccis Ribis rubri, R. aurei, Germania. — Est status ascophorus *Glaeosporii Ribis* (Lib.) Mont. et Desm. — Cl. Klebhan in Zeitschr. f. Pflanzenkr. XVI (1906) p. 82 pro hac specie constituit gen. *Drepanopeziza*.

3. **Pseudopeziza jaapii** Rehm, Ascom. exsicc. n. 1727, Ann. Mycol. V (1907) p. 465. — Ascomatibus in hypophyllo late testaceo tin-

cto plerumque arcte congregatis, maculis fusco-brunneis v. nigrescentibus innatis, semiglobose prominentibus, clausis, dein urceolatis, disco orbiculari subhyalino, tenuiter marginato, excipulo glabro, fuscidulo, cum folii cellulis arcte connato, versus marginem cellulis elongatis contexto, 0,2-0,3 mm. diam.; ascis fusoideis, lata basi sessilibus, versus apicem acutatis subincrassatisque, octosporis, 50-60 \times 14; poro jodo dilute tineto; sporidiis oblongis, saepe subcurvatis, interdum apice superiore obtusis, inferiore acutatis, 1-cellularibus, hyalinis, 25 \times 2,5, parallele in asci lumine positis; paraphysibus filiformibus, 1,5 μ ., versus apicem 2-4 μ . cr., hyalinis.

Hab. ad folia putrida Pruni Padi, Triglitz, Prignitz, Germania (JAAP).

4. *Pseudopeziza Loti* Boud., Icon. Mycol. t. III, tab. 562 (1907), Hist. 5804 et Classif. Discomyc. Europe (1907) p. 179. — Erumpens, minuta, sessilis, extus nigricans, margine denticulato, hymenio cinerescente 0,20-0,30 mm. lato; ascis oblongo-clavatis, octosporis, foramine immarginato, 50 \times 8, ad basim non attenuatis; paraphysibus cylindraceis, simplicibus aut parce divisis, vix septatis, ad apicem rarius incrassatis, 2-4 μ . cr.; sporidiis albis, oblongo-clavatis, ad apicem intus granulosis, 12-14 \times 2,5-3.

Hab. in caulinis emortuis Loti majoris, Montmorency Galilia. — A *Ps. Trifoli* et *Ps. Medicaginis* differt præcipue sporidiis non guttulatis et matrice diversa.

5. *Pseudopeziza subcalycella* Rehm, Ann. Mycol. VII (1909) p. 541. 5805 — Ascomatibus in maculis orbicularibus creberrimis, crasse fusco-cinctis, demum papyraceo-albidulis, 1,5-2 mm. diam., 1(-2) plerumque in hypophyllo innatis, dein prorumpentibus et sessilibus, primitus globoso-clausis, dein disco orbiculari explanato dilute roseolo, sicco vitellino, margine tenuissimo albidulo cincto, versus basim constrictis, excipulo albescente, glabro, parenchymatico crasse contexto; ascis clavatis, apice rotundatis, usque ad 100 \times 8-9, octosporis, jodi ope nulla; sporidiis ellipsoideis, unicellularibus, hyalinis, 2-guttulatis, 8-9 \times 4, monostichis; paraphysibus filiformibus, 2,5, ad apicem usque ad 3 μ . cr., hyalinis.

Hab. ad Miconiæ folia, São Leopoldo, Rio Grande do Sul Brasiliae (THEISSEN S. J.).

6. *Pseudopeziza Salicis* (Tul.?) A. Potebnia, Ann. Mycol. (1910) p. 79. 5806 An *Trochila Salicis* Tul. — Ascomatibus sparsis, subhemisphaericis erumpentibus, parte basali conica folio immersis, 170 μ . altis, superne 140 μ . lat., excipulo atro-brunneo cinctis; hypothecii con-

textu pseudoparenchymatico ab illo subhymeniali prosenchymerico distincto; ascis clavatis, 60-70 \times 14, octosporis; paraphysibus filiformibus, simplicibus v. furcatis, asco paullo longioribus, 75-85 \times 2; sporidiis ovoideis, biguttulatis, monostichis, 13-14 \times 5,5-6.

Hab. in foliis hibernatis Salicis albæ, socio *Glaeosporio Salicis*, cuius est status ascophorus, in Germania (JAAP).

7. **Pseudopeziza Vleugelii** Rehm, in litt. Jan. 1912. — Ascomatibus 5807 in hypophyllo late fuscato gregariis, innatis dein emergentibus, orbicularibus, siccis concavis, pallidioribus; disco plano vel convexulo, haud conspicue marginato, rufo-ferrugineo, 100-200 μ . diam., excipulo tenuissimo parenchymatico; ascis cylindraceis, apice rotundatis, 70-80 \times 10-13, bisporis, jodo immutatis; sporidiis oblongis utrinque rotundatis, haud guttatis, 1-cellularibus, hyalinis, 15-17 \times 8-10, monostichis; paraphysibus filiformibus, septatis, hyalinis, 2 μ . cr., ad apicem 2,5 μ . cr.

Hab. ad folia putrida Salicis nigricantis, Umea Sueciæ bor. (VLEUGEL). — A *Pseud. versicolori* (Wahlbg.) Rostr. et *Pseud. Salicis* A. Potebn. imprimis ascis bisporis dignoscenda.

TROCHILA Fr. — Syll. VIII p. 728, X p. 49, XIV p. 814, XVI p. 785, XVIII p. 158.

1. **Trochila ? chilensis** Speg., Fungi Chilenses (1910) pag. 130. — 5808 Ascomatibus saepius epiphyllis innatis, epidermide nigrificata decidua tectis, disco nigris, 0,5-1,5 mm. diam.; ascis subclavulatis antice subacutiuscula rotundatis, postice leniter sensimque attenuato-pedicellatis, 70-80 \times 8-9, octosporis, paraphysibus filiformibus apice non v. vix subincrassatulis cinctis; sporidiis e fusoideo-subnavicularibus utrinque subacutiusculis atque minute uniguttulatis, parvis, hyalinis, oblique monostichis, 14-15 \times 4.

Hab. in foliis dejectis Lardizabalæ biternatae, Cerro Caracol de Concepcion, Chile, Amer. austr.

2. **Trochila Perseæ** Speg., Fungi Chilenses (1910) p. 131, cum icon. 5809 — Ascomatibus sparsis amphigenis, orbicularibus parvis, epidermide nigrificata serius saepius cruciatim disrupta tectis, disco piano fusco; ascis clavulatis apice obtusissimis, postice longiuscula attenuato-pedicellatis, 50-60 \times 10, parce paraphysatis, tunica jodi ope perditute cærulecente; sporidiis distichis e cylindraceo subellipsoideis, subnavicularibus, utrinque obtusis, parvis, hyalinis, 9-10 \times 3.

Hab. in foliis dejectis subputrescentibus Perseæ Lingue prope Ciudad de Valdivia Chile, Amer. austr.

3. *Trochila leopoldina* Rehm, Ann. Mycol. VII (1909) pag. 539. — 5810
 — Ascomatibus hypophyllis, gregariis, innatis, primitus globoso-clausis, nigro-tectis, dein emarginatis, disco extus tenuiter laci-niato, orbiculari, hyalino, explanato, 0,3-0,4 mm. diam., siccis ni-gris; ascis clavatis, apice rotundatis, 45-50 × 7, octosporis; sporidiis clavatis, unicellularibus, biguttatis, hyalinis, 8-9 × 3, distichis; paraphysibus filiformibus, hyalinis, 1,5 μ. cr., versus apicem 2 μ. cr.; excipulo fusco, cellulis permagnis parenchymatice contexto; hymenio dilutissime flavidulo.

Hab. in foliis Nectandræ rigidæ, São Leopoldo Rio Grande do Sul Brasiliæ (THEISSEN S. J.).

STEGIA Fr. — Syll. VIII p. 733, XIV p. 814, XVIII p. 157.

1. *Stegia subvelata* Rehm — Syll. VIII, pag. 734 — fm. *juncicola* 5811
 Rehm ap. Jaap in Abh. bot. Ver. Prov. Brandenb. II (1907) p. 13.
Hab. in calamis Junci Jacquinii, Passo della Furca, 2430 m. alt. Helvetia. — A typo vix, nisi matrice, differt.

BONANSEA Saccardo, Microm. Americani novi, Journ. of Myc. v. XII (1906) p. 50 (Etym. a cl. doct. SYLVIO BONANSEA fungi detectore).

— Ascomata epidermide tecta, dein erumpenti-subsuperficialia, disiformia, ceracea (brunnea), disco mox aperto, planato; excipulo brevissimo obsolete prosenchymatico. Ascii cylindracei, paraphysati, octospori. Sporidia sphæroidea, hyalina, nucleata, dein brunnea. — Gen. *Stictophacidio* Rehm affine sed præcipue sporidiis globosis distinguendum. Est quasi *Pseudopeziza* sphæro-phæospora.

1. *Bonansea mexicana* Saccardo, I. c. pag. 51. — Ascomatibus 5812
 epiphyllis, secus nervos seriatis et interdum confluentibus, rimose erumpentibus et epidermide bullata exalbata tectis v. cinctis, disiformi-applanatis, 400-600 μ. diam., tenuissime marginatis, ambitu circulari-angulosis, umbrinis, ceraceis; ascis cylindraceis rarius cylindrico-clavulatis, 100 × 8 vel 100 × 11 (si clavulatis deorsum sensim tenuatis, parte sporif. 50-60 μ. longa, apice obtusis, octosporis; paraphysibus bacillaribus, hyalinis, 2-3 μ. cr., continuis, simplicibus; sporidiis typice monostichis, rarius subdistichis, globosis, 7-8 μ. diam., initio hyalinis, dein brunneis, 1- raro 2-nucleatis, levibus.

Hab. in foliis languidis v. emortuis Anonæ Cherimoliæ, Tenancingo, Mexico. — Excipulum tenuissimum rufo-melleum, granulis crystallinis copiosis asperulatum.

Sect. 3. Didymosporæ.

ABROTHALLUS De Not. — Syll. VIII p. 739, XVIII p. 161.

1. **Abrothallus Parmeliacum** (Sommf.) Nyl. — Syll. VIII, p. 739 — 5813
var. *dothideæformis* (Fekl. in herb. sub *Abrothallus*) Rehm, Ann.
Mycol. V (1907) p. 535. — Ascomatibus in superficie thalli orbiculariter vel striæformiter usque ad 1 cm. longi, convexe tumidis, demum maculatim denigratis, arcte congregatis, innatis, per rimas reticulatas nigras prorumpentibus, ca. 150 μ . diam.; ascis cylindraceis, apice rotundatis, 80 \times 9, octosporis, jodi ope nulla; sporidiis subclavatis, utrinque obtusis, medio septatis et subconstrictis, ultraque cellula guttam magnam oleosam includente, cellula superiore latiore, subfuscis, 12 \times 5-6, monostichis; paraphysibus arcte conglutinatis, hyalinis.

Hab. in thallo Peltigeræ caninæ, Budenheim, Germania
(FÜCKEL in herb. BOISSIER).

2. **Abrothallus Moorei** Lindsay, Observ. on new Lichen. Microfungi 5814
(1869) p. 546, t. 24, f. 18-21. — Ascomatibus . . . ; ascis (ex iconæ)
tereti-clavatis apice rotundatis, deorsum sensim et breviter tenua-
to-stipitatis, octosporis; sporidiis monostichis oblongis continuis (?)
hyalinis (?) dein 1-septatis, brunneis.

Hab. in thallo Cladonia bellidifloræ, Kelly's Green Hi-
bernia (Ireland) Verrucaria Taylori, Verr. fusiformis
et Graphidis scriptæ in Britannia. — Descriptio l. c. deside-
ratur et species videtur perdubia.

3. **Abrothallus cærulescens** Kotte, Centralbl. f. Bakter. etc. II Abt. 5815
XXIV Bd. (1909) pag. 86, tab. III, fig. 31. — Mycelio jodi ope
cyaneo tincto; sporidiis 13-15,6 \times 4,9-5,9.

Hab. in Parmelia conspersa in Germania.

4. **Abrothallus Curreyi** Lindsay, Lich. and Fgi. Otago p. 409, t. 29, 5816
fig. 1-5. — Syll. XIX, p. 1. — Ascomatibus scutellato-disciformi-
bus rufo-brunneis pallide marginatis; ascis clavatis, 30 \times 15, breve
stipitatis, paraphysibus clavatis sursum atro-brunneis, stipatis ob-
vallatis; sporidiis ellipsoideis v. suboblongis, 7-8 \times 5-6, hyalinis,
utrinque obtusis, medio saepe constrictulis et verisimiliter demum
1-septatis et brunneis.

Hab. parasitice in thallo Parmelia perforata ad truncos
et ramos arborum in Nova Zelandia.

5. *Abrothallus Glabratulae* Kotte, Centralbl. f. Bakter. etc. II Abt. 5817 XXIV Bd. (1909) pag. 80, tab. III, fig. 25. — Mycelio jodii ope azureo tincto; sporidiis 10,9-13,1 \times 4,6-5,2; conidiis 5,4-6,5 \times 3,9-4,4.
Hab. in *Parmelia glabratula* in Tirolia merid. et Bavaria.
6. *Abrothallus Peyritschii* (Stein) Kotte, Centralbl. f. Bakter. etc. II 5818 Abt. XXIV Bd. (1909) p. 76, tab. I, fig. 1-24, *Abrothallus Parmeliarum* var. *Peyritschii* Stein 1879. — Mycelio jodii ope cyaneo tincto; sporidiis 10,4-13 \times 4,6-5,9; conidiis 5,2-6,7 \times 3,9-5,2.
Hab. in thallo *Cetrariæ caperatae*, Austria et Tirolia meridionali.
7. *Abrothallus Cetrariæ* Kotte, Centralbl. f. Bakter. etc. II. Abt. 5819 XXIV Bd. (1909) p. 82, fig. 1 et tab. III, fig. 26-28. — Verrucas seu gallas efformans; mycelio jodi ope nulla; sporidiis 12,4-13,7 \times 3,9-6,2; conidiis 4,9-6,5 \times 3,9-4,9.

KEITHIA Sacc. — Syll. X, p. 49.

1. *Keithia tetraspora* (Phillips) Sacc. — Sacc. Syll. X, p. 50. — Huc 5820 ducenda est, præeunte cl. Patouillard, *Didymascella Oxycedri* Maire et Sacc. — Syll. XVIII, p. 162 — Confer R. Maire in Bull. trim. Soc. Myc. de France (1905) p. 140. — Genus *Didymascella* Maire et Sacc. est inde delendum. Species habitat in Juniperis in Britannia et Corsica.

FABRÆA Sacc. — Syll. VIII p. 735, X p. 50, XIV p. 815, XVIII p. 160.

1. *Fabræa Crantziae* Speg., Myc. Arg. IV in An. Mus. Buenos Aires (1909) p. 457, fig. 40. — Innato-erumpens, laxe gregaria, rufescens glabra, minuta, orbicularis, infra convexula, supra applanata, margine integerrima, 150-200 μ . diam., subcoriacella; ascis subclavulatis, apophysatis, apice acutiuscula subrotundatis, crassiuscula tunicatis, 50 \times 12; sporidiis elliptico-biconicis, diblastis, hyalinis, ad septum non constrictis, 16 \times 5, lenissime inæquilateris.

Hab. ad folia viva Crantziae lineatæ in inundatis, Canadon, Gustra, Chubut, Patagonia reip. Argentinæ.

PHÆOFABRÆA Rehm, Ann. Mycol. VII (1909) p. 541 (Etym. *phæos* obscurus et *Fabræa*). — Sporidiis subfuscis a *Fabræa* imprimis distinguitur.

1. *Phæofabræa Miconiae* Rehm, l. c. — Ascomatibus in maculis epi- 5822 phyllis granulato-convexis, suborbicularibus, fuscescentibus 1-4 mm.

diam., in hypophyllo demum subfuscis, hypophyllis, erumpentibus, plerumque 2-4 aggregatis, rarius dispersis, primitus globoso-clavis, dein suburceolatis, tenuissime marginatis, demum patellaribus, disco fuscidulo crasse marginato, 0,3-0,5 mm. diam., denique sessilibus; excipulo ab initio albescente, dein fusco, glabro, sicco atro, corrugato, crasso; ascis clavatis, apice rotundatis, 90-100 \times 10, octosporis, jodi ope nulla; sporidiis oblongis, utrinque rotundatis, subfuscis, septo medio hyalino, utraque cellula guttam oleosam magnam includente, 1(-2-)stichis; paraphysibus filiformibus, 2 μ ., versus apicem 4 μ . cr. et subfuscis, epithecium formantibus.

Hab. ad folia Miconiae, Sao Leopoldo Rio Grande do Sul Brasiliae (THEISSEN S. J.).

Sect. 3. Scolecosporeæ.

RHYTISMA Fr. — Syll. VIII p. 752, X p. 51, XI p. 433, XIV p. 817, XVI p. 790, XVIII p. 164.

1. **Rhytisma acerinum** (Pers.) Fr. — Syll. VIII, p. 753 — var. ⁵⁸²³ *australe* Sacc. in Ann. Mycol. (1911) p. 250. — A typo differt ascocarneis in circulum magis regularem et minus confertim dispositis, paullo majoribus, 3 \times 1,5 mm., opace nigricantibus, non nitidis (ob epidermidis matrix naturam); fructificatione eadem.

Hab. in foliis languidis Aceris obtusifolii, Mondoulla ins. Cypri (J. HOLMBOE, comm. G. LAGERHEIM).

2. **Rhytisma ?Lagerstroemiæ** P. Henn., Hedwigia XLVII (1908) p. 262. ⁵⁸²⁴ — Stromatibus innatis, rotundatis v. effusis, epiphyllis, atris, rimosis (immaturis visis).

Hab. in foliis Lagerstroemiæ speciosæ, Luzon, Prov. Bataan, Lamao ins. Philipp. (COPELAND).

3. **Rhytisma ?Viburni** P. Henn., Hedwigia XLVII (1908) p. 262. ⁵⁸²⁵ — Stromatibus amphigenis, atris, bullatis, rotundatis (immaturis observatis).

Hab. in foliis [Viburni?], Luzon, Prov. Benguet, Mt. Touglon ins. Philippin. (MERRILL).

4. **Rhytisma Padi** Rabenh. in Kl. Herb. viv. n. 761 et 1953 (nomen ⁵⁸²⁶ nudum).

Hab. in foliis Pruni Padi in Germania.

5. **Rhytisma Ulmi** Engelh. Abhandl. Senckenb. nat. Ges. XXIX (1908). ⁵⁸²⁷ — *Hab.* in pliocæne super. in Germania.

COCOMYCES De Not. — Syll. VIII p. 744, X p. 51, XI p. 432, XIV p. 818, XVI p. 789, XVIII p. 164.

1. **Cocomyces** Verhæ Speg., An. Mus. Nac. Buenos Aires t. XVII 5828 (1908) p. 132. — Maculis suborbicularibus subdefinitis 3-10 mm. diam.; ascomatibus in maculis laxe gregariis ex orbiculari subquadratis 150-200 μ . diam., stellatim dehiscentibus; ascis fusoideis brevissime pedicellatis, supra crassiuscule tunicatis, 50 \times 5-6, paraphysibus filiformibus simplicibus apice vix incrassatulis, plus minusve subuncinatis commixtis, octosporis; sporidiis acicularibus 40 \times 1, minute multi-guttulatis, hyalinis.

Hab. ad folia dejecta subputrescentia Ilicis paraguariensis prope San Pedro Argentiniæ Amer. austr.

2. **Cocomyces Boydii** A. L. Smith, Trans. Brit. Mycol. Soc. 1907, 5829 v. III (1908) p. 39. — Sparsus, suborbicularis, subdepressus, innoto-emergens et per corticem rotundatim dehiscentem emergens, disco pallido v. carneo-flavido, subnitido, 1-3 mm. lat.; ascis cylindraceo-clavatis, apice attenuatis, 90-115 \times 8; sporidiis filiformibus, multi-guttulatis v. obsolete multi-septatis, hyalinis, circ. 50-55 \times 1; paraphysibus numerosis, filiformibus, simplicibus, apicem versus flexuosis, quam ascis longioribus, omnino hyalinis, 1,5-2 μ . latis.

Hab. ad corticem Myricæ Gales, Killin Perthshire, Britannia (D. A. Boyd). — *C. triangulari* affinis sed differt ascis et paraphysibus angustioribus, sporidiis brevioribus etc.

3. **Cocomyces pampeanus** Speg. — Syll. XVIII, p. 818 — var. *chilensis* 5830 Speg., Fungi Chilenses (1910) p. 132, cum icon. — A typo reedit ascis sporidiisque paullo longioribus crassioribusque (ascis 80 \times 12-14; sporidiis 50-55 \times 2-2,5).

Hab. in foliis emortuis siccis Eryngii paniculati, Cerro Caracol de Concepcion, Chile Amer. austr.

4. **Cocomyces dentatus** (Kze. et Sch.) Sacc. — Syll. VIII, p. 745 5831 — var. *Lauri* Rehm in Theiss. Beih. Bot. Centralbl. Bd. XXVII (1910) Abt. II, pag. 406. — Ascomatibus hypophylis 0,6-1 mm. diam., cruciatis v. 3-5-lobulatis; ascis 65-90 \times 9-11, basi longe attenuatis, supra subcuneatis; sporidiis 50-62 \times 2.

Hab. in foliis siccis Lauraceæ cujusdam, Rio Grande do Sul Brasilie.

5. **Cocomyces quadratus** (Schm. et Kunze) Karst. — Syll. VIII, 5832 p. 746 — var. *Arctostaphyli* Rehm, in Jaap Beitr. Pilzfl. d. Schw. Ann. Myc. v. V (1907) p. 251. — (Nomen nudum),

Hab. in pag. inf. foliorum *Arctostaphyli* *Uvæ-ursi*, M. Schyningen Platte, 1975 m. alt. et M. Sempione (Simplonspitz) 2020 m. alt.

6. **Coccomyces Villæ-Viçosæ** Torrend. Bull. Soc. portugaise Sc. nat. 5833 III, 1 (1909) p. 7 (extr.). — Ascomatibus primum immersis, atris, rotundis, dein erumpentibus, excipulo irregulariter et laciniatim rupto, carbonaceo, crasso, atro, 0,5-1 mm. diam.; disco griseo-pallido; ascis clavatis, 140-170 \times 6-10, deorsum attenuatis, apice rotundatis, paraphysibus filiformibus, apice vix incrassatis; sporidiis linearibus, 70-80 \times 1,5-2, sursum attenuatis, ibique vix 1 μ . cr., primum irregulariter guttulatis, dein 7-8-septatis, interdum curvulis v. arcuatis.

Hab. in ligno pineo, Villa Viçosa Lusitaniae. — *Affinis Cocc. Pini*, a quo differt sporidiis angustioribus, ascis majoribus et ascomatibus minoribus.

7. **Coccomyces Bromeliacearum** Theiss., Beih. Bot. Centralbl. Bd. 5834 XXVII (1910) Abt. II, p. 407. — Ascomatibus tectis, rectangularris, rarius quadratis v. pentagonis, pulvinato-pyramidalis, acutius costatis, nigerrimis, nitentibus, margine stromatico nigro subundulato cinctis, c. 1 mm. diam. v. 1-1,2 \times 0,6-0,8 mm., cruciatim vel 5-laciniatim dehiscentibus, disco griseo; ascis cylindraceo-clavatis, breviter pedicellatis, supra rotundatis v. leniter angustato-conoideis, p. sp. 78-90 \times 8-11, paraphysibus dilutis, dense constipatis, apice non incrassatis, 2-2,5 μ . cr. obvallatis; sporidiis filiformibus, hyalinis (v. lenissime flavidulis) parallelis, guttulatis, 60-75 \times 1,5.

Hab. in utraque parte foliorum basaliū aridorum Bromeliaceæ cujusdam epiphytæ, São Leopoldo, Rio Grande do Sul Brasiliæ (J. Rick).

CLITHRIS Fr. — Syll. II p. 803, IX p. 1027 (*Colpoma*), XVIII p. 165.

1. **Clithris Graphis** Rehm Ann. Mycol. VII (1909) p. 533. — Ascomata 5835 tibus gregariis, epidermide haud mutata primitus innatis, dein ab ea marginatis erumpentibus, demum sessilibus, linearibus, rectis v. vario modo subcurvatis, utrinque acutatis, plerumque arcte congregatis, transverse in ramulo sitis, nigris, scabris, 0,5-5 mm. longis, 0,4-0,5 mm. latis, rima angusta linearī apertis, labiis elongato-rugosis, paullulum distantibus, haud carbonaceis; ascis clavatis, apice rotundatis, 80-85 \times 9, octosporis; sporidiis acicularibus, rectis, non v. indistincte septatis, hyalinis, 80-33 \times 1,2, parallele positis,

paraphysibus filiformibus, apice circinato-flexuosis, hyalinis, 1,5 μ . crassis.

Hab. ad ramum corticatum Pini balsameæ, S. Juan Island Wash. Amer. bor. (E. T. et S. A. HARPER). — *Clithri crispæ proxima*.

Sect. 4. Dictyosporæ.

DOTHIORA Fr. — Syll. VIII p. 764, XVI p. 790.

1. **Dothiora Salicis** Vleugel, Svensk Botanisk Tidskr. Bd. II (1908) 5886 pag. 374, fig. 3, a, b. — Ascomatibus gregariis, primo in cortice immersis, sphæroideis, clausis, dein per rimam longitudinalem vel lacinias 3-4 prorumpentibus, atque laciniis circumdatis, applanatis, nigris; ascis clavatis 80-140 \times 12-20; sporidiis hyalinis, 5-7-loculatis, clavato-fusoideis, in medio paullum constrictis, loculis singulis septo longitudinali divisis, 26-29 \times 6,5-8.

Hab. in cortice Salicis sp., Umea Sueciæ.

Fam. 10. Patellariaceæ Fr.

Sect. 5. Hyalosporæ.

PATINELLA Sacc. — Syll. VIII p. 769, X p. 52, XI p. 433, XIV p. 818, XVI p. 791, XVIII p. 165.

1. **Patinella californica** Rehm, Ann. Mycol. VII (1909) p. 534. — 5887 Ascomatibus gregariis, primitus innatis, clausis, dein emergentibus, demum fere sessilibus, oblongis, vario modo contortis, disco plus minusve appланato et orbiculari, distincte marginato, atris, 0,2-0,8 mm. diam., excipulo subfusco, glabro, parenchymatice crasse contexto, siccis corrugatis; ascis clavatis, apice rotundatis, 60-65 \times 7-8, 8-sporis jodo immutatis; sporidiis ellipsoideis, 1-cellularibus, biguttulatis, hyalinis, 7-8 \times 2,5-3, distichis; paraphysibus filiformibus, ad apicem dichotomis, usque ad 5 μ . crassis et fuscidulis, epithecium formantibus; hypothecio fuscidulo.

Hab. in ramis Adenostomatis fasciculati émortuis, Mounts prope Claremont California Amer. bor. (C. F. BAKER). — *P. flexellæ proxima*.

2. ***Patinella tryblidioides*** Rehm, Ann. Mycol. V (1907) pag. 584. — 5838
Ascomatibus dispersis, erumpentibus, dein sessilibus, patellaribus, primitus clausis, crasse marginatis, nigris, glabris, 0,8-0,5 mm. d., coriaceis; ascis clavatis, apice rotundatis, 70-75 × 14-15, octosporis, jodi ope totis cærulescentibus; sporidiis ovoideis, 1-cellularibus, guttulis oleosis repletis, hyalinis, 12 × 7, 1-stichis; paraphysibus apice dichotomis et incrassatis, septatis, epithecium chalybeo-cæruleum formantibus; hypothecio subhyalino.

Hab. ad ramulum exsiccatum Juniperi in valle Venna alpium tridentinarum prope Brennerum, ca. 1800 m. (Dr. REHM). — Ab affini *Pat. atro-viridi* dignoscitur ascomatis colore et ascis sporiisque multo amplioribus.

- PSEUDOPHACIDIUM** Karst. — Syll. VIII p. 776, XIV p. 818, XVI p. 791, XVIII p. 169.

1. ***Pseudophascidium Smithianum*** Boudier, Trans. Brit. Mycol. Soc. 5839
 1908 v. III (1909) p. 81, tab. IV. — Minutum 0,30-0,31 mm. latum, primo endophyllum dein erumpens demumque liberum, sub-turbinatum, extus nigrum, glabrum, marginatum, margine primo dentato, intus cum hymenio olivaceum; paraphysibus simplicibus, tenuibus ad apicem vix incrassatis non v. ad summam basim divisus; ascis subcylindraceis, inferne paulatim attenuatis, inoperculatis, octosporis, 160-170 × 20; sporidiis ellipsoideis, apicibus obtusis, levibus, rectis v. leniter curvulis, primo guttulis oleosis 1-2 p. cr. cum aliis minutissimis numerosis repletis, dein eguttulatis, 17-19 × 10-12, hyalinis v. pallidis.

Hab. ad folia Empetri nigri, Kilbirnie Ayrshire (D. A. BOYD) et Loch Alsh Rossire (G. L. SMITH) Britannia.

- PLACOGRAPHA** Th. Fr. — Syll. XVIII p. 167.

1. ***Placographa mexicana*** Rehm, Ann. Mycol. IV (1906) p. 337. — 5840
Ascomatibus primitus immersis, dein emergentibus, demum sessilibus, globoso-clausis, mox urceolatis, disco oblongo vel plerumque orbiculari, crasse irregulariter verrucoso-marginato, hyalino-flavidulo, demum interdum gyroso-plicatis, extus verruculosus, nigro-fuscis, 0,5-1,5 mm. diam., siccis plicatis vel corrugatis, ceraceis, excipulo crasso subfusco parenchymatico; ascis clavatis, apice rotundatis, 60-70 × 8, jodi ope nulla, octosporis; sporidiis oblongis, rectis, utrinque obtusis, 1-cellularibus, hyalinis, 8-10 × 3-3,5, distichis in superiore asci parte; paraphysibus filiformibus, septatis,

1,5 μ . cr., ad apicem multoties ramosis, 2 μ . cr., sordide flavidulis, epithecium crassum formantibus; hypothecio fuscidulo.

Hab. ad lignum putridum, New-Mexico Amer. bor. (SEAVER).

— *Habitus* fere cenangioideus; ad *Patinellam* tamen vergit.

ROBERTOMYCES Starb., Ascom. Schwed. Chaco-Cordill. Exped.; Ar-kiv. f. Bot., Bd. V (1905) pag. 5 (Etym. in honorem Doctorum ROB. et Rob. junioris FRIES). — Ascomata erumpentia, patellariae, orbicularia, convexa, textura fuligineo-atrata, coriaceo-carbonacea, in juvenibus stratu superficiali textura erecta parallela prosenchymatica pallidiore. Ascii in hoc stratu gignuntur; inter ascos evolutos restant reliquæ contextus prosenchymatici in epithecium globuloso-cellulosum, fuligineo-nigrum transeuntes. Sporidia hyalina, continua. Paraphyses nullæ. — Genus quoad locum in systemate dubium.

1. **Robertomyces mirabilis** Starb., l. c. p. 5; fig. 4 *a-c*. — Ascomatibus gregariis, saepè nonnullis confertis vel fere confluentibus, sessilibus, erumpentibus, peridermio relaxato irregulariter, orbiculariter, polygone vel elliptice determinatis, junioribus cinereo-albidis, tumidule nigro-marginatis, $1/2$ -1 mm. diam., demum crassioribus, totis nigris, usque ad 2 mm. diam.; contextu hypothecii parenchymatico coriaceo, partis parietalis excipuli densissime carbonaceo, partis hymenialis (ubi ascii oriuntur), porrecto-prosenchymatico, cellulis minutis, pallidis; ascis octosporis, ellipsoideo-elongatis vel late cylindraceis, sursum primo valde incrassatis, sessilibus, 101-127 \times 23-25; sporidiis hyalinis continua, conglobatis vel distichis, ellipsoideis, saepè inaequilateralibus, 28-32 \times 12-14; paraphysibus nullis; jodi ope ascis non cærulecentibus.

Hab. in ligno emortuo, Salta circa 100 m. supra oppidum et Jujuy, Santa Clara in ramulis aridis, in Argentina; in ramulis siccis Gourlieæ decorticatis (Papilionaceæ), Tarija et Suroro inter Tarija et Gran Chaco in Bolivia.

Sect. 2. Phæosporæ.

LAGERHEIMA Sacc. — Syll. X p. 55.

1. **Lagerheima pilosa** Syd., in De Wildem., Fl. Bas-Moy. Congo t. III, fasc. I (1909) Extr. p. 19. — Ascomatibus superficialibus, sparsis v. paucis aggregatis, planis, marginatis, sessilibus, atris, patellatis,

2-5 mm. latis, extus ad marginem rufo-brunneis et pilis rigidulis usque ad 250 μ . longis, 6-14 μ . cr. continuis, fuscis dense vestitis; ascis cylindraceis, 70-90 \times 4-6, octosporis; sporidiis monostichis, elipsoideis, continuis, obscure olivaceo-fuscis, 9-12 \times 4-5; paraphysibus copiosissimis, coalescentibus, asco longioribus, sursum usque ad 6 μ . incrassatis, flavis et epithecium efformantibus.

Hab. in ligno decorticato putri, Kisantu Congo, Afric. trop. (VANDERYST).

Sect. 3. Didymosporæ.

PATELLEA Fr. — Syll. VIII p. 783, XIV p. 820, XVIII p. 173.

1. **Patellea karschioides** Kirschst., Verh. Bot. Ver. Brandb. XLVIII 5843 (1906) p. 40. — Ascomatibus sparse gregariis, nigris, orbicularibus acute marginatis, basi in pedicellum brevem crassiusculum tenuatis, usque ad 1 mm. diam.; ascis cylindraceo-clavatis in pedicellum brevem crassum angustatis, supra rotundatis, 38-48 \times 5-6, octosporis; sporidiis oblique monostichis v. distichis, ovoideis, hyalinis, rectis 4-6 \times 2-3; paraphysibus hyalinis filiformibus, continuis, supra globoso-incrassatis et summo apice obscure brunneis, 4 μ . cr., epithecium efformantibus; hypothecio brunneo.

Hab. in ligno udo pineo, Gebhardtshof prope Rathenow Germaniae. — A ceteris speciebus forma paraphysium et minutie sporidiorum distincta.

KARSCHIA Körb. — Syll. VIII p. 729, X p. 56, XI p. 434, XIV p. 820, XVI p. 792, XVIII p. 176.

1. **Karschia Elasticæ** Koord., Botan. Untersuch. (1907) pag. 162. — 5844 Ascomatibus superficialibus, sessilibus, plano-patellatis, coriaceo-carbonaceis, atris, $\frac{1}{3}$ mm. diam., levibus; ascis clavatis, apice haud incrassatis, 3-8-sporis, paraphysatis, 33-35 \times 8,5-9; sporidiis 1-2-distichis, oblongis v. ovoideo-oblongis, 1-septatis, pallide fuscescensibus, ad septum lenissime constrictis, 10-13,5 \times 3,5-5; paraphysibus simplicibus crassis in massam gelatinosam pallide flavescentem coalitis, apice incrassatis.

Hab. in cortice Fici elasticæ prope Karang-gajam prov. Kedu Java (KOORDERS).

Sect. 4. Phragmosporæ.

PATELLARIA Wahlenberg — Syll. VIII p. 786, X p. 61, XI p. 434, XVI p. 795, XVIII p. 179.

1. **Patellaria Theobromatis** d' Almeida et da Camara, Bol. Socied. Botteriana v. XXV (1908-1909) p. 240. — Ascomatibus sparsis, convexiusculis, nigranticibus, coriaceis, erumpenti-superficialibus, sessilibus, tenui-marginatis; ascis immaturis distincte claviformibus, maturis v. siccis subcylindraceis, valde paraphysatis, octosporis, 70-80 \times 10-17; sporidiis distichis, leviter clavulatis, griseis v. luteo-brunneis, quinque-septatis, non v. vix constrictis, 16-20 \times 5-7,
Hab. in cortice Theobromatis Cacao, in ins. St. Thomæ.

LECANIDION Rabenh. — Syll. VIII p. 795, X p. 60, XIV p. 821, XVI p. 796, XVIII p. 183.

1. **Lecanidion antarcticum** Speg. — Syll. VIII p. 798 — var. **durelioides** Speg., Fungi Chilenses (1910) pag. 132. — A typo recedit ascomatibus in sicco, subhysteroideis v. corrugatis; ascis sporidii sque paullo majoribus (asci 80-90 \times 18; sporidia 30-45 \times 6-9).

Hab. in ramis emortuis Lobeliæ salicifeliæ, Cerro Alegre de Valparaiso Chile Amer. austr.

2. **Lecanidion Henningsii** (Ran.) Sacc. et Trott., *Patellaria Henningsii* 5847 Ranojevic, Ann. Mycol. VIII (1910) p. 354, fig. 19-21. — Ascomatibus crebre distributis, primum immersis hysteroideis dein patentibus, demum superficialibus . . . ; ascis cylindraceis, clavatis, breviter pedicellatis, apice rotundatis, crasse tunicatis, 76-144 \times 10-13,5, octosporis; sporidiis distichis, clavato-elongatis, fusoideis, rectis v. curvulis, 3-9- vulgo 5-7-septatis, 26-46 \times 5-7, hyalinis; paraphysibus septatis, supra furcatis et epithecium crassum brunneovirescens efformantibus, 1-1,5 μ . cr.; hypothecio hyalino v. brunneolo.

Hab. in caulinibus siccis Verbasci phlomoidis prope Belgrad. Serbiæ. — A *Lec. Verbasci* bene distinctum.

3. **Lecanidion submacrosporum** (Rehm) Sacc. et Trott., *Patellaria submacrospora* Rehm, Ann. Mycol. V (1907) p. 535. — Ascomatibus dispersis, primitus innatis et globoso-clausis, dein sessilibus, patellariibus, distincte marginatis, orbicularibus, nigris, glabris, 0,3-0,4 mm. diam., coriaceis; ascis clavatis, apice rotundatis, 100 \times 14, octosporis, jodi ope nulla; sporidiis ellipsoideis, utrinque acutatis, re-

ctis, transverse 3-septatis, hyalinis, strato mucoso 4 μ . cr. obductis, 15-18 \times 6-7, distichis; paraphysibus dichotome ramosis, 2 μ . cr., ad apicem flavidulis; hypothecio subfuscus; excipulo crasso, fuscus, parenchymatico.

Hab. ad ramulum Juniperi in valle Venna montis Brenner alpium Tridentinarum ca. 1800 m. (Dr. REHM). — *Lec. macrosporo* affine, sed sporidia tantum 4-cellularia.

4. **Lecanidion paulistanum** Speg., Fungi in Paul. Rev: Mus. La Plata 5849 t. XV, p. 31. — Maculis nullis; ascomatibus patellaribus sessilibus dorso convexulis, nigris, disco planiusculo impressis, margine angusto acutiusculo calloso cinctis, intus albis, coriaceis, 0,5-1,5 \times 0,25-0,75 mm.; ascis e cylindraceo subclavulatis, apice subtruncato - rotundatis, postice attenuatis atque in pedicellum breviusculum productis, 99-100 \times 12-14, jodi ope leniter cærulescentibus; paraphysibus filiformibus paullo longioribus apice fusco-coalescentibus densis obvallatis; sporidiis rectis v. leniter curvulis utrinque obtuse acutatis 16-20 \times 4-6 triseptatis, ad septa constrictulis, loculis grosse uni-guttulatis, hyalinis.

Hab. ad ramulos emortuos arbusculæ ignatæ cujusdam, Spiranga Brasilia (USTERI).

STILBOPEZIZA Speg., Anal. Mus. Nac. Buenos Aires t. XVII (1908) p. 131 (Etym. *Stilbum* et *Peziza*). — Cenangioidea, erumpens, minuta, cæspitosa, cupulis atris, cum strato conidiophoro Phæostilbum sistente commixtis. Asci fusoidei, paraphysati; sporidiæ octona fu- soidea multiseptata, hyalina.

1. **Stilbopeziza Yerbæ** Speg., l. c. pag. 131, cum icon. — Stipitibus 5850 conidiophoris basi confluentibus atque subcylindraceis sursum applanatis, crispulis v. subramulosis 0,5-2,5 mm. alt., 0,15-0,25 mm. diam., atris subcarbonaceis fibroso-parenchymaticis sterilibus; ascomatibus constipatis sessilibus obsolete subiculigeris, hypothecio convexo sessilibus, epithecio concolori planiusculo margine acutiusculo nigro; ascis fusoideis sursum obtusis tunica percrassa vestitis, breviter pedicellatis, octosporis, 100-110 \times 12-14; sporidiis oblique distichis elongato-ellipsoideis utrinque acutiusculis, 28-32 \times 5-6, leniter inæquilateralibus primo 10-12-blastis, serius 9-11-septulatis, ad septa non constrictis.

Hab. ad ramos dejectos putrescentes Ilicis paraguariensis in silvis secus rivulum Matto Queimado Rep. Argentinæ Amer. austr.

LEPTOPEZIZA Rostr. — Syll. VIII p. 794 (ut subgen.).

1. **Leptopeziza mindanaensis** P. Henn., Hedw. XLVII (1908) p. 262. 5851

— Ascomatibus superficialibus singularibus, rotundato-discoideis, marginatis, atris, 1,5-2 mm. diam.; disco levi, atro; ascis fusideo-clavatis, apice attenuatis, obtuso-rotundatis, 130-150 \times 20-30, 8-sporis; paraphysibus superantibus, ramosis, septatis, hyalinis, 2 μ . cr. apice coalitis, fuscidulis; sporidiis subdistichis, oblonge fusoideis, utrinque acutis v. obtusiusculis, 5-7-septatis, fuscis, 50-60 \times 10-12.

Hab. in Corticio ad ramos emortuos, Mindanao, Davao, Mt. Apo ins. Philippin. (COPELAND).

Sect. 5. Dictyosporæ.

BLITRYDIUM De Not. — Syll. VIII p. 802, XI p. 435, XIV p. 823, XVIII p. 185.

1. **Blitrydium** Mate Spegazz., Anal. Mus. Nac. Buenos Aires t. XVII 5852 (1908) pag. 132. — Ascomatibus cupulatis, margine obtusis 90 μ . diam., epithecio carnosulo olivaceo concaviusculo, contextu minute indistincteque subprosenchymatico, matrici dealbata leniter insculptis; ascis apice subtruncato-rotundatis basi abrupte rotundatis vix pedicellatis, 35-40 \times 8-10, octosporis, paraphysibus filiformibus longioribus obvallatis; sporidiis didymis ellipsoideo-subbiconoideis, non v. obsoletissime subclavulatis, 3-septatis, ad septum medium sat constrictulis, loculis mediis longitudinaliter divisis, hyalinis, loculis primo guttulatis dein granulosis, 12-14 \times 5-6.

Hab. ad ramos decorticatos emortuos Ilicis paraguariensis circa San Pedro Rep. Argentina Amer. austr.

PLEIOPATELLA Rehm, Ann. Mycol. VI (1908) p. 314 (Etym. *pleios* plenior et *Patella*). — Ascomata sessilia, primitus clausa, dein urceolata, demum disco orbiculari plano patellari, crasse marginato, in stipitem crassum brevissimum elongata, atra, ceracea, hypothecio subfuscō, Ascii cylindracei, 1-spori. Sporidia oblongo-cylindracea, multoties longitudinaliter et transverse septata, hyalina. Paraphyses filiformes, versus apicem subfuscae et epithecium formantes. Hymenium jodi ope tinctum. — Ab affinibus *Pleiotrichide* et *Pleioticta* recedit imprimis ascomatibus sessilibus, non erumpentibus etc.

1. **Pleiopatella Harperi** Rehm, Ann. Mycol. VI (1908) pag. 315. — 5853
Ascomatibus dispersis, haud perspicue erumpentibus, sessilibus, primus globoso-clausis, dein urceolatis, disco demum patellari, orbiculari, crasse marginato, atris, 0,5-1,2 mm. diam., extus glabris, in stipitem crassum brevissimum elongatis, excipulo crasso parenchymatico fusco; ascis cylindraceis, apice rotundatis, c. 90 × 25, monosporis; sporidiis oblongo-cylindraceis, utrinque rotundatis, multoties transverse et horizontaliter septatis, hyalinis, 70-80 × 18-22; paraphysibus subconglutinatis, 0,3 µ. cr., versus apicem septatis et subfuscis, 5 µ. cr., cellulis ultimis 7-8 µ. long.; hypothecio fusco, hymenio jodi ope cœruleo tincto.

Hab. ad corticem Cupressi sp.? (Cedar), Longmires Springs Washington Amer. bor. (E. T. et S. A. HARPER).

TRYBLIDARIA Sacc. — Syll. VIII p. 805, XIV p. 33, XVIII p. 186.

1. **Tryblidaria argentinensis** Spegazz., An. Mus. Nac. Buenos Aires 5854
 t. XIX (1909) p. 439. — *Ascomatibus superficialibus primo hysterioideis dein patellari-apertis medio rimosis, margine elevatis aterrimis 0,5-2 mm. diam.; ascis linearibus basi pedicello crasso nondulosoque suffultis, 90-100 × 12-14, octosporis, paraphysatis; sporidiis oblique monostichis ex ellipsoideo lenissime obovatis, 16-18 × 8-9, saepius 3-rarius 4-5-septatis, ad septa leniter constrictulis, loculo centrali supero septo altero verticali fere semper diviso, pallide olivaceis.*

Hab. ad trunco decorticatos vetustos Prosopidum pr. Alto Grande, San Luis, Rep. Argentina America austr.

2. **Tryblidaria Garryæ** (Earle) Sacc. et Trott., *Tryblidium Garryæ* 5855
 Earle, Bull. of the N. Y. Bot. Gard. (1904) p. 290. — *Ascomatibus sparsis, subsuperficialibus, nigris, rugosis, patellatis, margine obscuris, 1 mm. circ. lat., 0,25 mm. cr.; ascis clavatis, longe stipitatis, circ. 120 × 8; paraphysibus filiformibus, supra ramosis; sporidiis subdistichis, primum 1-4-septatis et hyalinis, demum obscure brunneis, 10- v. ultra septatis, septis longitudinalibus etiam numerosis, plerumque curvulis, circ. 35 × 14.*

Hab. in ramis decorticatis Garryæ prope Stanford Univ. California Amer. bor. (C. F. BAKER).

3. **Tryblidaria patagonica** Spegazz., An. Mus. Nac. Buenos Aires 5856
 t. XIX (1909) p. 440. — *Peritheciis sparsis v. laxe gregariis primum hysterioideis mox patellari-apertis, nigris, parvis; ascis linearibus basi breviter crasseque pedicellatis 90-100 × 10-20, paraphy-*

sibus apice ramosulis commixtis, octosporis; sporidiis ellipsoideis, sæpius distichis, 20-30 \times 7-10, typice 24 \times 8, transverse 5- longitudinaliter 1-septatis, olivaceis.

Hab. ad caudices aridos Verbenæ lignosæ eujusdam in Puerto San Antonio, Patagonia, America austr. — Cum *Tr. argentinensi* notis plurimis ad *Patellariam* vergit, peritheciorum juvenilium tamen fabrica ad interim huc inscribuntur. *T. subsidua* (C. et E.) Sacc. secundum descriptiones affines.

4. **Tryblidaria violascens** Rehm, Ann. Mycol. V (1907) pag. 532. — 5857

Ascomatibus gregariis, primitus cortici albulo innatis, dein emergentibus, ab eoque crasse, demum rimose marginatis, orbicularibus, planis, disco atro, 0,3-1 mm. diam.; ascis clavatis, apice rotundatis, crasse tunicatis, ca. 150 \times 40, bisporis; sporidiis oblongo-ellipsoideis, utrinque rotundatis, rectis, transverse ca. 23, longitudinaliter pluries septatis, inde dense muriformibus, primitus hyalinis, dein violaceis, 60-80 \times 25, parallele positis; paraphysibus filiformibus, septatis, 1,5 μ ., versus apicem subramosis, 3 μ . cr., epithecium violaceum formantibus; hypothecio cum excipulo crasso flavo-fuscido, gonidiis nullis; jodi ope hymenio haud mutato, episporio vero obscurius tincto.

Hab. ad ramulum, Sao Paulo Brasiliæ (USTERI). — Cum *Tr. megalospora* et *Bombyliospora pachycarpa* (lichene) affinitate quadam devincitur.

5. **Tryblidaria roseo-atra** von Höhnel, Stzb. k. Ak. d. Wiss. Wien, CXVIII, Abt. I (1909) pag. 347. — Ascomatibus erumpentibus demum superficialibus, primum nigris dein discum roseo-carneum ostendentibus, subtus rugulosis supra convexiusculis, 0,5-1 mm. latis, plerumque in massas crustaceas usque ad 5 mm. latas generatissimis diffluentibus; epithecio bistratioso; hypothecio 360-400 μ . cr. minute parenchymatico; ascis clavatis sessilibus, octosporis, supra rotundatis, 84-93 \times 18-24; sporidiis distichis, hyalinis, tenuiter tunicatis, rectis v. curvulis variabilibus, plerumque elongato-fusoideis apice obtusis v. rotundatis, transverse 5-7 longitudinaliter interrupte septatis, ad septa non constrictis, 26-31 \times 8-9; paraphysibus indistincte filiformibus epithecio adnatis. J.-

Hab. ad basim ed in vaginis Sacchari Soltwedelii, Buitenzorg in ins. Java (RACIBORSKI).

Fam. 11. Caliciaceæ Fr.

RÖESLERIA Thüm. et Pass. — Syll. VIII p. 826, XI p. 439.

1. *Roesleria pallida* (Pers.) Sacc. — Syll. VIII, p. 826 — var. *farinacea* (Chev.) Sacc. et Trav. — Syll. XX, pag. 697 — *Coniocybe farinacea* Nyl. Syn. Lichen. pag. 163, t. V, f. 42. — Stipitibus firmioribus nigricantibus, capitulis majoribus albis differt a typo.

Hab. ad trunco vetustos Ulmarum et Æsculorum in regione Parisiensi et in Germania.

2. *Roesleria Bubonis* (Rostr.) Sacc. et Trott., *Pilacre Bubonis* Rostr., 5860 Fungi Groenl. orient. in Meddel. om Groenl. XXX (1904) p. 114. — Stromatibus gregariis, stipitato-capitatis, albidis, 5-6 mm. altis, 1-2 mm. crassis; capitulo disciformi-depresso, levi, fusco; sporidiis ellipsoideis, 1-guttulatis, hyalinis, 5-6 \times 4.

Hab. in pilulis rejectis Strigum, Kap Dalton, Groenlandia.

ACOLIUM Ach. — Syll. VIII p. 839.

1. *Acolium sessile* (Pers.) Rehm, Krypt. Fl. III, p. 398 et p. 386, 5861 cum icon., *Acolium stigonellum* (Ach.) De Not. — Syll. VIII, p. 839. — *Calicium sessile* Pers. Tentam. disp. fung. suppl. pag. 59. — Ascomatibus gregariis sessilibus, primo globosis, clausis, disco rotundo plano-scutellato, tenui, saepe albido-marginato, denique convexo et immarginato, asperulo praeditis, deorsum leviter tenuatis, 0,3-1,2 mm. diam., nigris, subcorneis; ascis primo fusoidieis, tenuibus, breviter stipitatis, 45 \times 8-9, dein cylindraceis et facile dilabentibus, 90 \times 9, quadri-octosporis; sporidiis ellipsoideis, constricto-didymis, grosse 2-guttatis, primo hyalinis, dein atro-brunneis, 12-15 \times 6-7, submonostichis; paraphysisibus filiformibus, demum brunneolis.

Hab. ad thallum Pertusariæ amaræ, P. communis, P. coccoidis, P. ceuthocarpæ, rarius aliorum lichenum, ad cortices quercinos, pineos, fagineos etc. in Germania, Suecia, Helvetia.

Fam. 12. Arthoniaceæ REHM.

LECIDOEOPSIS Almq. — Syll. X p. 76.

1. **Lecideopsis californica** Rehm, Ann. Mycol. VII (1909) p. 534. — 5862

Ascomatibus in cortice late dealbato dispersis, sessilibus, orbicularibus, subconvexulis, nigro-fuscis, 0,1-0,2 mm. diam., haud marginatis neque excipulo cinctis, siccis planis; ascis ovoideis, apice incrassatis, 30-35 × 15, 8-sporis; sporidiis oblongo-clavatis, medio subconstrictis, utrinque obtusis, guttulis minutissimis repletis, hyalinis, 12-15 × 5; paraphysibus conglutinatis, apice incrassatis, hypothecium fusco-cæruleum formantibus; hypothecio hyalino sine gonidiis; jodii ope hymenio cæruleo-tincto.

Hab. ad caules emortuos Baccharidis vimineæ in montibus prope Claremont Calif. Amer. bor. (C. F. BAKER). — *L. galactiti* proxima.

2. **Lecideopsis ?cæruleo-atra** von Höhnel, Fragm. Myk. VII (1909) 5863

in Sitzb. k. Ak. d. Wiss. Wien, CXVIII, Abt. I, pag. 880. — Ascomatibus immarginatis, nigro-opacis, hemisphæricis, superficiilibus, 200-350 μ. lat., circ. 120 μ. cr., concentrica subcæspitosis v. gregariis, saepe concrescentibus; excipulo nullo; contextu cartilagineo-gelatinoso, nigro-cyaneo; ascomatibus plectenchymaticis; hypothecio nigro-cyaneo usque ad 40 μ. cr., minute parenchymatico; paraphysibus radiatim dispositis simplicibus v. ramosulis, 4-5 μ. latis, distincte septatis, supra epithecium tenuem nigrum efformantibus; ascis octosporis, ex ovoideo subglobosis, basi in pedicellum filiformem 20-30 μ. long. abrupte contractis, crasse tunicatis, 50-60 × 28; sporidiis congregatis, bilocularibus, e hyalino lenissime brunneolis, elongato-ellipsoideis, ad septum vix constrictis, apice rotundatis, contentu granuloso, tenuiter tunicatis, extus mucosulis, 20-24 × 7-8.

Hab. in cortice levi arborum, prope Buituba Sao Paulo Brasilæ (WETTSTEIN et SCHIFFNER).

ARTHONIA Ach. — Syll. X p. 77.

1. **Arthonia punctiformis** Ach. — Syll. X, pag. 77 — var. **populina** 5864

(Mass.) Sacc. et Trav. — Syll. XX, pag. 1189, — *Arthonia populina* Mass., Ric. Lich. crost. pag. 50, fig. 91; Jatta Mon. Lich.

it. Merid. tab. VII, fig. 25. — Ascis 3-5-sporis; sporidiis quadrilocularibus 15 ~ 3,6.

Hab. in truncis et ramis Populi tremulæ in agro Veronensi Ital. sup.

ARTHOTHELIUM Mass. — Syll. X p. 77.

1. **Arthothelium atro-purpureum** Starb., Ascom. Regn. Exped. I, p. 9, 5865 t. I, f. 10, extr. — Ascomatibus in ligno dealbato laxe gregariis, primo immersis, dein erumpentibus, pulvinulatis, orbicularibus v. subellipticis, 0,3-0,5 mm. diam., 100-200 μ . alt., disco pulveraceo atro-purpureo v. subinde olivascente; ascis obpiriformibus, breviter noduloso-pedicellatis, apice rotundatis, crasse tunicatis, 50-63 ~ 30-35, octosporis, paraphysibus conglutinatis superne septatis obvallatis; sporidiis congregatis oblongis utrinque obtuse rotundatis, 21-25 ~ 9-11, transverse 6-8-septatis, non constrictis, septis non nullis longitrosum partitis, hyalinis.

Hab. in ligno vetusto ad oppidum Bahia Brasiliæ. — Gonidia nulla.

2. **Arthothelium laricinum** Rehm, in Jaap Ann. Mycol. VI (1908) 5866 p. 207 (nomen nudum).

Hab. in ramis emortuis Laricis deciduæ prope St. Ulrich Austriae.

Fam. 13. Exoascaceæ SADEB.

EXOASCUS Fuck. — Syll. VIII p. 816, X p. 69, XI p. 435, XIV p. 823, XVI p. 803, XVIII p. 196.

1. **Exoascus nikkoensis** (Kus.) Sacc. et Trott., *Taphrina nikkoensis* 5867 Kus., Bot. Mag. Tokyo XXI (1907) p. 65, cum icon. — Mycelio subcuticulari plerumque hypophyllo; ascis cylindraceis v. leniter clavatis, apice rotundatis vel subtruncatis, 40-50 ~ 10-13, cellulis basilaribus rotundatis, 10-15 ~ 10-13, tunica tenuiori præditis; sporidiis globosis v. ellipsoideis, plerumque 8 in quoque asco, 5 μ . d. v. 7 ~ 4-5.

Hab. in foliis bullatis Aceris purpurascens, prope Nikko prov. Shimozuwa Japonia.

2. **Exoascus Aesculi** (Ell. et Ev.) Flora Patterson, North Amer. pa. 5868 ras. Exoasc. t. IV, f. 1, *Ascomyces deformans* var. *Aesculi* Ell. et Ev., N. Amer. Fungi n. 1887, *Taphrina Aesculi* (Ell. et Ev.)

Giesenagen in Flora 81 (1895) pag. 358, f. 66. — Surculos et folia inficiens et subinde leviter torquens; maculis 2-5 mm. diam., flavidis, denique penetrantibus et matricis contextum rubefacientibus; ascis amphigenis, dense stipatis, utrinque rotundatis, 16-18 \times 7-9, cellula basali carentibus; sporidiis ellipsoideis, 6 \times 3, hyalinis.

Hab. in foliis surculisque *Aesculi californicæ* in California Amer. bor. (HARKNESS).

3. **Exoascus Bussei** v. Fab., Tropenpflanzen, Heft 11 (1907), *Taphrina* 5869 *Bussei* v. Faber in Arb. K. Biol. Anstalt Berlin, VI, Heft 3 (1908) cum icon. et VII (1909) p. 207-209, fig. 8. — Mycelio intracellulari; ascis 15-17 \times 5, octosporis; sporidiis ellipsoideis 2,5 \times 1,7; cladomanias, folia magnitudine minora reddendo, efformans.

Hab. in caulinis *Theobromæ Cacao*, Kamerun Africæ trop.

4. **Exoascus Piri** (Kusano) Sacc. et Trott., *Taphrina Piri* Kusano in Ann. Mycol. III (1905) p. 31. — Maculas in foliis flavidas, albo-pruinosas, subrotundas v. irregulares formans; mycelio subcuticulari, non permanenti; ascis cellula basilari carentibus, cylindraceis utrinque rotundato-truncatis, 29-42,5 \times 9-13; sporidiis globosis, 3-5 μ . diam.

Hab. in foliis *Piri Miyabei* Sarg., Nikko Japoniæ (KUSANO).

5. **Exoascus andinus** (Palm.) Sacc. et Trott., *Taphrina andina* Palm., 5871 in Svensk Bot. Tidsskr. III (1909) p. 193, fig. 1-5. — Maculas sæpe bullatas, indeterminatas, rubescentes efficiens; ascis epiphyllis v. hypophyllis, cylindraceis, apice rotundatis v. truncatis, 27-34 \times 9,5-13,6, cellula basilari cuboidea epidermidem non intrante, 9-13 \times 9-10; sporidiis octonis subglobosis, 4,5 \times 3,5, microsporis globosis, minutissimis ascum omnino implentibus.

Hab. in foliis vivis *Pruni salicifoliæ*, Quito et Ambato Äquatoriæ (LAGERHEIM).

6. **Exoascus Sebastianæ** Sadeb. in Ber. Deut. Bot. Gesell. (1904) 5871 p. 119, t. IX. — Hypophyllus, pustuliformis, in epiphyollo maculiger, sæpe deformans; ascis dense parallele stipatis, valde polymorphis, modo anguste cylindraceis 70-80 \times 6-9, ima basi 2-3 μ . cr., modo clavatis et magis ludibundis, nūnc clavatis, nunc oblongo-ellipsoideis apice rotundatis v. subtenuatis, 57-90 \times 9-20 (incl. cellula basilari); sporidiis octonis subinde senis v. septenis, monostichis v. distichis, in ascis cylindraceis apicem sæpius occupantibus, ovoideis v. ellipsoideis, 5,5-6,5 \times 4,5-5, hyalinis, intus nubilosus et 1-guttulatis.

Hab. in foliis Sebastianæ brasiliensis, Tubarao Brasilicæ (E. ULE). — Imprimis maxima ascorum variabilitate mox dignoscenda species.

7. **Exoascus Robinsonianus** (Giesenh.) Sacc. et Trott., *Taphrina Robinsoniana* Giesenhagen in Flora v. 81 (1895) p. 341-342, fig. 41, *Taphr. alnitorqua* Robins. non Tul. — Cfr. Ellis North Am. Fungi n. 796. — Mycelio hymenium compactiusculum subcuticulare gigante; ascis cellula basilari 15-17 \times 6-10 præditis, cylindraceis, apice subrotundatis, basi truncatis, 29-37 \times 6-10, pro more octosporis; sporidiis sphæroideis, 3,5-6 μ . diam., interdum in ipso asco germinantibus.

Hab. in carpellis quæ deformat, Alni incanæ in America boreali. — A speciebus alnicolis dignoscitur quia fructicola et matricem deformans, ascis cellula fulcrante præditis etc.

8. **Exoascus entomosporus** (Thaxt.) Sacc. et Trott., *Taphrina entomospora* Thaxter, Botan. Gazette, L (1910), p. 437, tab. XVIII, fig. 1-6 et p. 435, fig. 1. — Strato ascorum livide albido, totam paginam inferiorem folio occupante, ex mycelio inter cuticulam et epidermidem generato nascente; ascis dense confertis, subcylindricis, apice rotundatis v. subtruncatis, cellula basali latiore instructis, supra epidermidem positis; sporidiis entomomorphis, octonis, plasmate dense granuloso obscuratis, primum simplicibus, ovalibus, deinde appendiculatis; appendicibus biformibus, aliis utrinque terminalibus, rectis, cylindraceis v. subclavatis, aliis utrinque subterminalibus, plerumque quaternis, rigidis, tenuibus, divergentibus, subcurvatis, subattenuatis, subverticillatis; ascis 55-60 \times 13-15; sporidiis 9-10 \times 3-4; appendicibus terminalibus 8-12 \times 3,5, subterminalibus 15-25 \times 0,8.

Hab. in foliis vivis deformatis Nothofagi antarcticæ var. bicrenatae et var. uliginosæ, Punta Arenas Patagoniae, Amer. austr. — Species omnino peculiaris et potius genus propriam (*Entomospora* Sacc.) formans.

TAPHRINA Fr. — Syll. VIII p. 812, X p. 67, XI p. 437, XIV p. 824, XVI p. 1152, XVIII p. 197.

1. **Taphrina Kusanoi** Ikeno in Flora v. 92 (1903) p. 2-3, tab. 1-2, 5875 fig. 1 17. — Ascis hypophyllis, cellula fulcrante parentibus, cylindraceis, apice rotundatis deorsum leviter tenuatis, basique vero imam dilatatis, 102-117 \times 13-19, myriosporis; sporidiis (conidiis?) perexiguis, ellipsoideis v. oblongis.

Hab. in foliis *Pasaniæ cuspidatæ* in Japonia (KUSANO). —

Affinis *Taphrina Johansonii*.

2. *Taphrina moriformis* Bubák, Bull. Herb. Boiss. 2 ser., VI (1906) 5876

p. 398. — Excrecentiis moriformibus, gibboso-foveolatis, 2-5 mm. diam., carnosus, obscure brunneo-purpurascens; ascis subcylindraceis 30-45 μ . long., apice 4-6 μ . latis, ibique tunica 2-3 μ . cr., basi angustioribus, pallide flavo-brunneis; sporidiis nondum evolutis.

Hab. in frondibus *Aspidii rigidii*, Njegus prope Cetinje Montenegro.

3. *Taphrina Mume* Nishida, Cfr. K. Yoshino, in Bot. Mag. Tokyo 5877 XIX (1905) p. (203).

Hab. in foliis *Pruni armeniacæ* var. *Ansu* in Japonia. —

Diagnosin ab auctore obtinere non potui.

4. *Taphrina Hiratsukæ* Nishida, Cfr. K. Yoshino in Bot. Mag. Tokyo 5878 XIX (1905) p. (202).

Hab. in frondibus *Onoclea* sp. in Japonia. — Diagnosin ab auctore consequi non potui.

Genus incertæ sedis.

ROLLANDINA Patouill. Bull. Soc. Mycol. Fr. (1905) p. 80, t. V (Etym. a cl. mycologo L. ROLLAND). — Receptaculum determinatum ex hyphis septatis, ramosis, pannoso-contextis formatum. Ascii sub-octospori, ovoideo-globosi, minuti, hyalini, dense glomerati: glomeruli numerosi sparsi, noduliformes, trama undique obvoluti. Sporidia lentiformia circulariter canaliculata, continua, hyalina. — Genus ab auctore *Gymnoascaceis* interim adscriptum, sed revera multum desciscit.

1. *Rollandina capitata* Patouill., l. c. p. 83, tab. V. — Albida, erecta, 5879 stipitato-capitata, 15-20 mm. alta, molliusculo-gossypina; stipite rigidulo, glabro, 1 mm. cr., cylindraceo, superne dilatato; capitulo subgloboso, 5-8 mm. lato, nodulis albidis 150-300 μ . cr.; ascis ovoideo-globosis, tenuiter tunicatis, sessilibus, 2-4-8-sporis, 8 \times 6; sporidiis lentiformibus, 2,5-3,5 μ . diam., levibus, circulariter canaliculatis.

Hab. ad quisquiliis prope Bau-hau in regione Cai-Kinh Tonkini (L. BOULAN).

Fam. 14. Endomycetaceæ SCHRÖT.

EREMASCUS Eid. — Syll. VIII p. 822.

1. **Eremascus fertilis** Stoppel, Flora XCVII (1907) p. 332. — Ascis 5880 sphæroideis, 7-10 μ . diam. (ex icono), copiosissimis ex duarum hypharum contiguarum copulatione orientibus, octosporis; sporidiis tunica dupli præditis, ut ea *Saccharomycopsisidis* germinantibus, oblongo-ellipsoideis, sæpe subinæquilateris, 5,2 \approx 3.

Hab. in charta cum gelatina Mali et Ribis, loco frigido servata, in Germania.

ENDOMYCES Rees — Syll. VIII p. 821, X p. 70, XVI p. 1153, XVIII p. 202.

1. **Endomyces Mali** C. E. Lewis, Bull. Maine Agricult. Expt. St. 5881 n. 178 (1910) p. 63, fig. 58-71. — Mycelio ramoso, diffuso albido; conidiophoris brevibus, apice conidiis oblongis, subracemosis, levibus, hyalinis 8 \approx 3 coronatis; ascis plerumque ex ramulis brevibus lateralibus orientibus, globosis, 11-14 μ . diam.; sporidiis plerumque sphæricis v. sphærico-oblongis, 5,5 \approx 4,5, maturis brunneis, levibus.

Hab. in fructibus putrescentibus Piri Mali quos valde vexat, Orono, Maine Americæ borealis. — Quoad culturam artefactam confer Lewis l. c.

2. ? **Endomyces Hylecœti** Neger, Ber. Deutsch. Bot. Gesell. XXVII 5382 (1909) p. 388, cum icono (absque diagnosi). — Tantum formæ conidicæ observatæ: acervulis albis subcaseosis; hyphis 10 μ . cr. repentibus septatis, hinc inde ramos conidiophoros erectos simplices v. apice brevissime ramulosos gerentibus; conidiis perfecte globosis, acrogenis v. pleurogenis, subsolitariis, crasse tunicatis, circ. 18 μ . diam. (ex icono); hyphis alteris in catenulas *Oospore* longas abeuntibus; articulis breviter cylindraceo-oblongis utrinque truncatis.

Hab. in «ambrosia» Hylecœti dermestoidis in truncis arborum frondosarum et coniferarum, in Germania. — Species quoad genus omnino dubia.

3. **Endomyces vernalis** Ludw., Centralbl. Bakt. X (1891) pag. 12 et 5883 Lehrb. nied. Krypt. p. 202, Lindner Kryptog. Fl. Brandb., Pilze I, p. 34, f. 15. — Hyphis mycelii parce ramosis, 3-4 μ . cr., initio

subiculum minutum, denique stratum plura centimetra extensum tremori simile ex albo rubescens efformantibus; ascis rarioribus et ex mycelio dubie oriundis, subglobosis, 13-14 \times 1,3; sporidiis nondum bene observatis.

Hab. ex hypha scatente truncorum Betulæ et Carpini Betuli prope Greiz (LUDWIG) et Finkenkrug, Dessau etc. (LINDAU) sed mycelium tantum. In hoc observantur chlamydosporæ sphæricæ pleurogenæ et catenulæ oosporæformes acrogenæ.

4. **Endomyces javanensis** Klöcker, C. R. Trav. Labor. Carlsberg 5884 VII vol., 4 livr. (1909) p. 267, fig. 1-3. — Mycelio filiformi remote septato, in articulos cylindraceos facile secedente, hinc inde citriformiter inflato; cellulis citriformibus denique endosporas 1-2 generantibus; sporidiis seu endosporis ellipsoideo-globulosis, levissime depresso, 3-4,5 \times 2-3, costula angustissima æquatoriali v. plus minus laterali percursis.

Hab. ad terram ex insula Java in Germaniam allatam, indeque variis in mediis facile cultus in instituto Carlsberg, Copenhagen. — Fermentationem non provocat.

5. **Endomyces fibuliger** Lindner, Wochenschr. f. Brauerei XXIV (1907) 5885 p. 469, Dombrowski W., in C. R. trav. Laborat. Carlsberg, VII, fasc. IV (1909) pp. 247-266, cum 10 fig. — Mycelio filiformi varie et parce ramoso, inæquali, tortuoso, fibulato-septato, ibique denticulato, cellulas globosas, leves, 15-16 μ . diam. ex denticulis generante; cellulis denique endosporas 3-4 gignentibus; sporidiis seu endosporis subhemisphæricis, levibus, 6-7 μ . latis, facie plana circum circa marginulo emergente acuto ornatis, tunc faciem pileiformem induentibus; endosporis facile germinantibus et cellulas omnino saccharomycetiformes gignentibus.

Hab. in pane, ubi fungillus maculas cretaceas fingebat, inde variis in mediis cultus in Dania et Germania. — Fermentationem provocat.

Fam. 15. Ascocorticiaceæ SCHRÖT.

ASCOCORTICUM Bref. — Syll. X p. 71, XVIII p. 198.

1. **Ascocorticium albidum** Bref. — Syll. X, p. 41 — var. **aphthosum** 5886 B. R. S. in Saccardo, Not. Myc. VI, Ann. Myc. vol. III (1905) pag. 505. — Effusum, sparsum v. confluens, submembranaceum,

lenticulare, $\frac{1}{3}$ - $\frac{3}{4}$ mm., cinereum, margine pallidiore; ascis sessili-
bus, verticaliter stipatis, aparaphysatis, ellipsoideo-oblongis, octo-
sporis; sporidiis hyalinis, ellipsoideis, 6 \approx 2,5.

Hab. in cortice interiore Pini silvestris, Westmalle, Belgii.

Fam. 2. Atichiaceæ MILLARDET ().*

(Seuratiaceæ Vuill.).

ATICHIA Flot. in Linnæa XXIII (1850) p. 149, Rehm Disc. p. 500
(Etym. *a* priv. et *theicos* paries h. e. excipulum nullum). — Char-
acteres fam. et gen. Thallus gelatinosus subrotundus, pro more
lacinato-ramosus, sœpe stellato-ramosus, nigricans, applanatus, intus
albidus; contextu ex cellulis gemmantibus muco immersis, dein in
catenas juncitis formato, cellulis superficialibus saturatius coloratis,
rugulosis. Ascii sub thalli superficie v. inferius in glomerulos di-
positi, suboctospori; sporidia typice bilocularia, hyalina v. fuscella.

1. **Atichia glomerulosa** (Ach.) Flot. Linnæa XXIII (1850) pag. 149, 5887
Rehm, Discom. p. 500, *Atichia Mosigii* Flot. l. c. p. 150, *Hyphodictyon lichenoides* Millard., Act. Soc. helv. Sc. nat. (1866), *Collema glomerulosum* Ach. Lich. univ. p. 641 (1810). — Thallis basi contracta
sessilibus, depresso globulosis atro-brunneis, profunde divisis, sub-
inde dichotomice partitis, apicibus acutis, 2-4 mm. lat., 1 mm. alt.
ex cellulis inæqualiter globulosis, hyalinis, massa gelatinosa obvo-
lutis constantibus, superficie cellulis breviter pedicellatis, copiosis,
subrotundis, atro-brunneis, applanatis v. convexis, ad medium sen-
sim collabascentibus et pallidis marginatis, extimis (conidiis?) glo-
boso-ellipsoideis 4 μ . lat., seriatis; ? ascis clavatis 6-sporis; sporidiis

(*). De hoc singulari et anciipi familiola cfr. v. Höhnel « *Atichia Treubii* Saccharomyc. » in Annal. du Jardin Bot. de Buitenzorg, 2 sér. III suppl. (1909) p. 19. Quomodo prof. v. Höhnel hos fungillos nigricantes, epiphyticos, fere cap-
nodiaceos ad Saccharomycetes possit referre, me omnino latet. — Genera *Hetero-
botrys* Sacc. et forte quoque *Actinomma* Sacc. sunt verisimiliter *Atichiæ* species
tantum conidiophoræ, quarum ascis nondum innotuerunt. Mea *Heterobotrys pa-
radoxa* (Cir. Fungi ital. t. 807) omnino congruit cum *Seuratia Tonduzi* Mang.
et Pat. Comptes rendus des séances de l'Acad. des Scienc. Paris (1912) t. 151,
p. 1476, fig. I-II.

subfusoideis, 1-2-cellularibus, 11-15 \vee 4-5, guttulis binis valde re-fringentibus fœtis.

Hab. in foliis ramisque Pinorum, Abietum, Tiliæ, Visci in Lusatiae, Germaniae pluribus locis. Descriptio ascorum cum sporidiis est deprompta a cl. Millardetio, qui vero apotheciis 60-90 μ . diam. in *Atichia* parasiticis pertinere censem. Sec. von Höhnel *At.* (*Seuratia*) *pinicola* huc pertinet.

2. *Atichia Treubii* v. Höhn. in Ann. Jard. botan. de Buitenzorg II 5888 sér., III suppl. p. 27. — Thallis superficialibus sparsis v. gregariis, globoso-tuberoideis, 150-400 μ . diam., subinde laciniatis, pro more seriatis v. seriato-stellatis, mollibus, gelatinosis, siccis appلانatis, nigricantibus, udis olivaceo-brunneis, subdiaphanis; contextu interiore hyalino ex cellulis versiformibus ellipsoideis v. citrifor-mibus v. angulosis, reticulato-catenulatis, continua v. isthmico-con-nexis, 5-8 μ . long. efformato; cellulis superficialibus globoso-elli-psoideis, laxioribus, 3-5 μ . diam., extus saturate coloratis; ascis sparsis v. in greges minutos sub superficie dispositis, ovoideis, basi apiculatis, crasse tunicatis, octosporis, 32 \vee 25, aparaphysatis; spo-ridiis conglobatis, bicellularibus, ovoideis, diu hyalinis, demum brun-neolis, muco obvolutis, crasse tunicatis, 16-18 \vee 9-10, cellula sup. sæpius leviter crassiore; conidiis in thallo proprio oriundis, subsu-perficialibus, globoso-ovoideis, brunneolis, 3-4 μ . diam.

Hab. in foliis vivis Fici elasticæ in horto montano Tijbo-das ins. Javae.

3. *Atichia pinicola* (P. Vuill.) Sacc. et Trott., *Seuratia pinicola* P. 5889 Vuill. Bull. Soc. mycol. Fr. (1905) p. 74, t. IV. — Disciformis, mucilaginea, separabilis, extus nigricans, cuticula tenuissima, vix 0,4 mm. cr. tecta, intus plus minus vesiculosa, hyalina, vesiculis sphæ-roideis usque ad 8 μ . diam., inter se isthmis cylindraceis brevibus connexis, denique in chlamidosporas transmutatis et tunc 10 μ . diam., membrana 1,5 μ . cr. tectis; ascis intermixtis octosporis glo-bosis, dein subpiriformibus, hyalinis, 22-23 μ . diam. vel 24-27 \vee 10-13; sporidiis didymo-constrictis, hyalinis, 10-11 \vee 6, loculo su-periore interdum paullo ampliore.

Hab. in ramis cancerosis Pini halepeusis, Soubès Galliæ.
— Sec. v. Höhnel species hæc collideret cum *Atichia glomerulosa*.

4. *Atichia Vanillæ* (Pat.) v. Höhn., l. c. pag. 27 (ex errore « *vanilli-cola* »), *Seuratia Vanillæ* Pat., Bull. Soc. Myc. de France XXII (1906) p. 54, fig. 4. — Ascomatibus globosis circiter 600 μ . diam., gelatinosis, astomis, fusco-brunneis, gregariis v. solitariis, rarius

confluentibus, ex hyphis moniliformibus gelatinosis hyalinis (articulis 6-15 μ . long.) compositis; ascis oyoideis 40-50 \times 30; sporidiis hyalinis, ellipsoideis, medio septatis constrictisque, 19-20 \times 14, intus guttulatis.

Hab. in foliis languidis Vanillæ planifoliæ, Tahiti Polynesia. — *S. coffeeicolæ* Pat. affinis.

5. *Atichia Millardeti* Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 369. 5891
 Thallo sessili, 3-14 mm. lato, nigro, polypoideo, applanato, raditum fisso, libero, ramis modo brevioribus modo longioribus: brevioribus, sectione ovata v. rotunda indivisis, longioribus inæqualiter digitatis v. duplicito digitatis, gelatinosis, ex cellulis inflatis hyphas ramosas rosulatas formantibus contextis; fungi superficie verrucosa atro-brunnea, parte interiori lète brunnea; tuberculis in thalli superficie pulvinatis, 150-260 μ . lat., 120 μ . alt., subrotundis, brunneo corticatis et asperulis, intus ascigeris; ascis stratosis apaphysatis ad hyphas lateraliter insertis, denique cortice disrupto emergentibus, crasse tunicatis, late ovatis basim versus tenuatis 60 \times 35, octosporis; sporidiis bicellularibus, ovoideis, brunneo-tunicatis, levibus, utrinque rotundatis, medio constrictis, 16-19 \times 7-9, muco immersis.

Hab. in foliis Syzygii jambolani, Cinnamomi zeylanici, Coffea arabicae, Anacardii occidentalis, Styrae Benzoïn, præcipue in hortis Tjikemeuh Buitenzorg Javæ.

Fam. 17. Saccharomycetaceæ REES (*).

SACCHAROMYCES Meyen — Syll. VIII p. 916, XI p. 437, XIV p. 828, XVI p. 818, XVIII p. 198.

1. *Saccharomyces Würtzii* Boutroux in Ann. Sc. nat. ser. VI 17 (1884) 5892 n. XVIII, p. 197 et pag. 200, t. XVI, f. 42-46. — Tenuissime

(*) De biologia et morphologia hujus familiae multæ et graves dissertationes nuper prodierunt sed multum adhuc inquirendi reliquum est. Profecto hic essent referenda genera et species tantum ascophora, hinc gen. *Mycoderma*, *Cryptococcus* etc. essent excludenda, tamen ob vegetationis notas et habitum consumimam hic recensui. Ubique studiosus fontes descriptionum conferre debet, nam hic perpaucas tantum morphologicas at nullas physio-chemicalias afferre potui.

pelliculosus, liquidum non obturbans; cellulis liberis v. aggregatis, globosis v. subglobosis, guttulas 1-2 majusculas, chlorino-brunneolas foventibus, serius subirregularibus et guttulas minores in cludentibus.

Hab. in floribus, fructibus maturis e. g. Ribis, Vitis etc. et in Apibus in Gallia.

2. **Saccharomyces cirratus** Boutr. in Ann. Sc. Nat. sér. VI, 17 (1884) 5893 n. XIII, p. 190 et p. 200, t. XV, f. 32-33. — Tenuissime pelliculo-flocculosus, intra liquidum conspicue floccosus, sed non obturbans; cellulis junioribus in greges majuscules confertis, circa hyphas radiatim dispositas, cylindraceas, articulatas, interdum ramosas et tortuosas proferentibus, ellipsoideis v. globosis, sæpe breviter catenulatis, hyalinis, contentu homogeneo.

Hab. in floribus Petasitis, Ericæ, Nonneæ, Borraginis, in fructibus immaturis Ribis, in Apibus et Bombis etc. in Gallia. — An potius forma *Oospore* (*Sachsiae*)?

3. **Saccharomyces Pseudomycoderma** Boutroux, in Ann. Sc. nat., sér. VI, 17 (1884) pag. 191, n. XIV et p. 200, t. XV, f. 34 et XVI, f. 35. — Mycelio (culto in musto) membraniformi, albo, densusculo, ut *S. Mycoderma*; cellulis proteiformibus et magnitudine et dispositione variis, junioribus ellipsoideis, minutis, denique amplioribus, catenulatis vel non, subinde multo longioribus cylindraceis, nucleolis in quoque articulo singulis valde refringentibus.

Hab. frequenter in floribus et fructibus Sedi, Rhois, Rubi, Ribis etc. nec non in insectis Apibus, Muscis, Cetonia in Gallia. — An genuina *Saccharomyctis* species? An potius *Oospore* (*Sachsiae*) forma?

4. **Saccharomyces Rouxii** Boutr. Ann. Sc. Nat. sér. VI, 17 (1884) 5895 pag. 196, n. XVII et 200, t. IV, fig. 4, t. V, fig. 8 a-b. — Tenuissime pelliculosus, intra liquidum vix flocculosus, diaphanus; cellulis globosis v. ovoideis, vere regularibus, enucleatis, breviter catenulatis, apice proliferantibus.

Hab. in syrupis, confecturis atque in glycosio solido in Gallia.

5. **Saccharomyces monacensis** Hans., C. R. Trav. Laboratoire d. Carlsberg VII (1908) fasc. III, p. 196, fig. 6-9 (absque diagn.). — A *Sacch. carlsbergensi* Hans. differt præcipue quod temperie humiliori (1°-9°C.) ejus coloniæ e cellulis ellipsoideis v. sphæroideis constitutæ prævalent præ coloniis mycelicis.

Hab. in fermentatione Cerevisiae «levure basse de Carlsberg» dicta et in fermentatione Cerevisiae Monacensi frequens.

6. **Saccharomyces carlsbergensis** Hans., C. R. Trav. Laboratoire d. Carlsberg VII (1908) fasc. III, p. 188, fig. 1-5, 10 (absque diagn.). Cellulis variabilibus, ellipsoideis, ovoideis, piriformibus vel etiam subglobosis, cellulis giganteis nonnullis immixtis; temperatura germin. inter 0°C. et 33,5°C.; temperatura 0°C-9°C promovet coloniam mycelicam subtorulosam, temperatura superiore solum celulas gémantes favet; ascospore raro occurunt.

Hab. in fermentatione Cerevisiae «levure basse de Carlsberg» dicta.

7. **Saccharomyces Pasteurianus** Rees — Syll. VIII, pag. 917. — Ut ejus formæ II et III citandi sunt **Sacc. intermedius** Hans. ap. Lindner Krypt. Fl. Brandenb. VII, p. 10, f. 2 et **Sacc. validus** Hans. ap. Lindn. l. c. fig. 1, qui non in vino sed in cerevisia evolvuntur et eam in fermentationem inducunt.

8. **Saccharomyces ellipsoideus** Rees — Syll. VIII, p. 917. — Ut ejus forma II, nempe non in vino sed in cerevisia oriens eamque obturbans et vexans pertinet **Saccharomyces turbidans** Hans. ap. Lindner Krypt. Fl. Brandenb. VII, p. 11, f. 2.

9. **Saccharomyces Batatae** Saito in Centralbl. Bakter. XVIII (1907) 5900 p. 35, t. II, f. 19-21. — Cellulis forma et magnitudine ludibundis, 3-10 μ . diam., sphæroideo-ovatis v. subinde ellipsoideo-oblongis, 10-12 \times 4-6, in cultura magis elongatis et longè catenulatis; ascis 1-4-sporis, sepius 2-3-sporis; sporidiis sphæroideis, rarius subovoideis, 2-4 μ . diam., sepius 3-4 μ .

Hab. in liquore, quem generat, Moromi dicto, e radicibus Batatae extracto, in insula Hachijo Japonie.

10. **Saccharomyces Tokyo** Nakazawa, Centralbl. f. Bakter. etc. II 5901 Abt. XXII (1909) p. 540, fig. 1, 3, 5, 7. — Cellulis nunc globosis et 1,2-3,2 μ . diam. nunc subellipsoideis et 3-14 \times 2-9; cellulis giganteis plerumque ovoideis v. piriformibus; plasmate homogeneo v. modice granuloso; endosporis usque ad 4 in quoque asco; temperatura sporificationis 10°-35°C., optimum 31°C.

Hab. in liquore Saké in quo fermentationem alcoholicam inducit, in Japonia.

11. **Saccharomyces Yedo** Nakazawa, Centralbl. f. Bakter. etc. II Abt. XXII (1909) p. 540, fig. 2, 4, 6, 8. — Cellulis globosis 3,2-6,4, ellipsoideis, subellipsoideis et suballantoideis 4,5-20,8 \times 3,2-7,2; cellulis giganteis plerumque ovoideis, piriformibus; plasmate homo-

geneo v. modice granuloso; endosporis usque ad 4 in quoque asco temperatura sporificationis 10°-35°C., optimum 31°C.

Hab. in liquore Saké in quo fermentationem alcoholicam inducit, in Japonia.

12. **Saccharomyces orientalis** Beijer. in Centr. Bakt. II Abt., IV (1898) 5908 p. 725, t. XII, f. 5-6. — Cellulis subsolitariis, ellipsoideis, v. ovoideis v. oblongo-ovoideis, 4,5-7 \approx 4-4,5 parce guttulatis; cellulis endosporeis (ascis) subglobosis, 6-7 μ . diam., plerumque 2-3-sporis; sporidiis globosis v. e mutua pressione paullulum depresso, 3-3,5 μ . diam.

Hab. ex fermento Koji albo dicto ex Japonia (EYKMAN) dein in musto cerevisiae cultus. — Expositio auctoris tantum biologica. Notas ex iconibus eruimus.

13. **Saccharomyces Sojæ** Saito, Bot. Mag. Tokyo XIX (1905), n. 222, 5904 p. 76 et in Centralbl. für Bakter. II Abt. XVII (1907) p. 104, fig. 4 et 8 a. — Cellulis sphæroideis v. ovoideis, crassiuscule tunicatis, 4-8 μ . diam., contentu homogeneo vacuolis majusculis praedito; sporidiis quaternis, rarius singulis, globosis, 2,7-4,5 μ . diam., intus minutissime granulosis.

Hab. in fermento Sojæ in Japonia.

14. **Saccharomyces uvarum** Beijer. in Centralbl. Bakter. II Abt., IV 5905 (1898) p. 725, t. XII, f. 3-4. — Cellulis ellipsoideis v. globoso-ellipsoideis, 5,6 μ . diam. vel 8-9 \approx 5, minute pluri-guttulatis, solitariis; cellulis endosporeis (ascis) plerumque globosis, pro more 4-sporis; sporidiis sphæricis, 1,7 μ . diam.

Hab. in succo baccarum Ribis (*Johannisbeerensaft*) in Hollandia deinceps in Agar cultus. — Expositio auctoris tantum biologica; notas ex iconibus eruimus.

15. **Saccharomyces coreanus** Saito, Centralbl. f. Bakt. II Abt. XXVI 5906 (1910) pag. 371, f. 1. — Cellulis subglobosis ovoideis v. breviter allantoideis, crassiuscule tunicatis, 3-7 μ . diam., raro gemmiferis, saepius solitariis; endosporis binis v. quaternis subglobosis 2-3,5 μ . diam., facile lignentibus; in glycosium, saccharosium fermentationem inducens, non vero in maltosium; optimum temperie pro germinatione 37°C., pro sporificatione 32-34°C.

Hab. in fermento sic dicto sinensi in Corea. — Affinis *Sacch. Mariano* a quo differt quia in inulinum fermentationem non inducit. Utitur ad panem paniceum et spelatum conficendum. — Var. major K. Saito l. c. p. 374, fig. 2. — Differt cellulis majoribus, 8-12 μ . diam., sporidiis etiam majoribus, 3-4 μ . diam.

16. *Saccharomyces Allii* Sorok. apud Sorauer Atlas Pflanzenkr. t. XIX, 5907
f. 1-2. — Cellulis forma et magnitudine variabilibus, 3-15 \times 3, cito se multiplicantibus, sed tertia die fatiscentibus (ob evolutionem Bacteriorum?).
Hab. in squamis junioribus bulbi Allii Cepæ in Rossia, æstate humida (SOROKINÆ). — Inter squamas imprimis ad centrum bulbi initio efformantur guttulae gelatinosæ, albæ, omnino ex cellulis Saccharomycetis constantes et bulbos, fermentescendo, in pultem mucosam flavam postremo mutantes. Bacteria quoque bulbis morbum afferunt sed sæpe sine Saccharomycete, hinc bacteriosis est infectio propria.

17. *Saccharomyces Brassicæ* Wehmer in Centralbl. Bakter. II Abt. 5908 XIV(1905) p. 783, t. II, p. 68. — Cellulis globoso-oblongis, parum extensis, minutis, vix 6 \times 4-5, interdum (in culturis) minoribus; sporidiis adhuc non observatis; in succo Brassicæ oleraceæ fermentationem fervidam generat.
Hab. in caulibus (Brassicæ) salitis (*Sauerkraut*) in Germania alibique in officinis. — Cl. Auctor distinguit in eadem matrice quoque formam II (fig. 7): cellulis jugiter globosis, 3,6-4,8 μ . diam., interdum minoribus, nucleolis minutis fortiter refringentibus factis; et III (fig. 8) cellulis ellipsoideis paullo longius extensis, numquam globosis. Utraque quoque in officinis Brassicæ salitæ.

18. *Saccharomyces javanicus* Kruyff, Centralbl. f. Bakter. etc. II 5909 Abt. XXI (1908) p. 618. — Cellulis ellipsoideis, 10-12 \times 6-8; pro evolutione optimum temperaturæ 37°C., maximum 41°C.
Hab. frequens ad folia arborum plurimarum in ins. Java. — Inducit fermentationem alcoholicam in glycosio, saccharosio et maltosio. Speciei præsentis auctor sex formas alias distinguit, de quibus cfr. l. c.

19. *Saccharomyces sardous* Grixoni, Nuovo latte fermentato facile a 5910 prepararsi, in Ann. della medicina navale, vol. II, fasc. 3 (1905). — Cellulis aërobiis, initio globosis 3 μ . diam., demum ovoides 8 μ . longis, apice gemmiparis, tunica dupli præditis, intus granulosis, temp. 20-25°C. ascosporas gignentibus.
Hab. in lacte in quo fermentationem peculiarem inducit. — Apud sardos vulgo *Giorddu* audit et jamdudum bene utitur. Ex eodem lacte fermentescente auctor eduxit Bacillum proprium, quem *B. sardoum* nuncupavit.

20. *Saccharomyces Cicadarum* K. Sule in Sitzungsb. K. Böhm. Ge- 5911

sellsch. d. Wiss. Prag (1910) pag. 2, c. fig. (extr.) (*). — Cellulis non germinantibus solitariis, elongatis, 10-12 × 2-3, subinde longioribus, utrinque obtusulis; germinantibus inæqualiter oblongo-fusoideis, uno apice longe sensim tenuatis, fere cuspidatis, tunica tenui præditis, minute nucleolatis, ad apices attenuatos cellulas filias, subinde 2-5 inter se connexas gemmiparitate generantibus; cellularum seriebus interdum usque ad 60 μ. longis.

Hab. intra larvas Cicadæ (Tettigiae) Orni in Bohemia.

21. **Saccharomyces Conomeli-limbati** Karel Sulc, l. c. pag. 18, fig. X, 5912 extr. — Cellulis ellipsoideis v. ovoideis, minutissimis, utrinque subrotundatis, 3 × 1, uno polo apiculatis, altero cellulam filiam gemmipare exerentibus, plasma granulosum nucleumque globulosum continentibus, non catenatis.

Hab. in hæmolymphæ Conomeli limbati ex Homopteris in Bohemia.

22. **Saccharomyces Macropsidis-lanionis** Karel Sulc, l. c. p. 17, f. IX 5913 extr. — Cellulis fusoideis v. oblongo-fusoideis, utrinque acutulis v. hinc subrotundatis, uno polo leviter apiculatis, altero cellulam filiam gemmipare exerentibus, plasma granulosum et nucleum continentibus, minutis, 3 × 1, non catenatis.

Hab. in hæmolymphæ larvæ Macropsidis lanionis ex Cicadinis, in Bohemia.

23. **Saccharomyces symbioticus** G. Teodoro, in Atti Accad. Sc. veneto-trent.-istr. Padova V (1912) p. 13. — Cellulis ovoideis uno apice tenuatis, 8-10 × 3-4, plasmate continuo v. granuloso, hinc v. utrinque gemmantibus; gemmulis primo globulosis demum in for-
mam cellulæ matris mutatis.

Hab. in hæmolymphæ Lecanii Oleæ ♀ et Pulvinariæ camelicola ♀, Padova. — Teste auctore species valde accedit ad *Saccharom. apiculatum* var. *parasiticum* Lindner in Centralbl. f. Bakt. II Abt. (1895) p. 785, c. ic. lectus in Aspidioto Nerii ad folia Myrti, Berolini.

24. **Saccharomyces Anobii** Buchner, Stud. intracell. Symbiont. in 5915

(*) Quoad genera et species plus v. minus genuinas Saccharomycetum intra cellulas corporis insectorum quorumdam et præsertim Hemipterorum symbiotice parasitantes conferenda sunt commentaria oll. K. SULC, U. PIERANTONI, P. BUCHNER etc. Hic ex diagnosibus plerumque imperfectis auctorum notas vix sufficietes rettuli.

Arch. Protistk. Jena (1912) p. 104, f. 29. — Cellulis piriformibus, interdum curvulis, vacuolatis; mycelio (in culturis) moniliformi, ramuloso, cellulis ovato-oblongis, crasse guttulato-vacuolatis.

Hab. in cellulis intestinalibus *Anobii panicei* in Germania.

25. **Saccharomyces Anguillulæ** Dang., Le Botaniste, X (1907) p. 73, 5916 t V, f. 5-10. — Cellulis oblongo-ellipsoideis, utrinque rotundatis, æqualibus, 3-8 in catenulas dispositis et facile secedentibus, plerumque nucleo unico (raro binis) nucleolato præditis, præterea granulosis vacuolatisque (mensuris non indicatis).

Hab. intra corpus *Anguillulæ* in Gallia.

26. **Saccharomyces granulatus** Vuill. in Guéguen Champ. paras. 5917 p. 104, fig. 4. — Cellulis ovoideis v. ellipsoideis, interdum globulosis v. oblongis, 2-10 μ . long., plerumque 4-5 \times 3-4, tunica verruculis solitariis v. regulariter seriatis conspersa præditis, gemmulum unicam, raro 2-3 formantibus; guttulasque oleosas roseas, culturâ rubras foventibus; cellulis (ascis) tunica tenuiori præditis, levibus, sporidia 2-4 sphærica v. ellipsoidea foventibus.

Hab. in hæmatomate ossis maxillaris inf. hominis in Gallia. Quoad notas biologicas et pathologicas cfr. Guéguen l. c.

27. **Saccharomyces tumefaciens** (Curtis) Busse in Guéguen, Champ. 5918 paras. p. 104, fig. 3. — Cellulis sphæricis, interdum ovoideis germinando 40 μ ., protoplasma granulosum 16-20 μ . diam. foventibus, tunica 0,5 μ . cr.; capsula gelatinosa 8-10 μ . cr.

Hab. in tumoribus et abscessibus hominis in Gallia. — Pathogenus in mure, cane, cavia etc. Quoad charact. biolog. et pathol. cfr. Guéguen l. c.

28. **Saccharomyces anginae** Vuill. in Guéguen, Champ. paras. p. 103, 5919 fig. 2. — Cellulis ovoideis, 8-9 \times 5-6, solitariis v. per 8-10 aggregatis, sæpe uno apice germinantibus; cellulis (ascis) [in cultura] tetrasporis; sporidiis per tetrades v. seriatim dispositis, subrotundis, 2 μ . diam.

Hab. in partibus angina correptis hominis in Gallia. — Morbi causa certa videtur. Characteres biologicos vide ap. Guéguen l. c.

29. **Saccharomyces Blanchardi** Guiart in Coupin, Champ. parasit., 5920 t. XXVIII, f. 1-5, *Sacch. de Blanchard* etc. Guéguen, Champ. paras. p. 105. — Cellulis sphæricis 1,5 μ . subinde usque ad 15-20 μ . diam., plasmate diaphano vix granuloso, viridulo faretis, nucleo nullo manifesto, tunica crassiuscula zonaque v. capsula mucosa diametrum cellulæ æquante præditis, gemmulis sæpe gemnatis.

Hab. in massa glareosa peritonei hominis ægroti in Gallia.

30. **Saccharomyces membranogenes** Steinhäus, Centralbl. f. Bakter. 5921

I Abt. XLIII (1907) p. 49. — Cellulis sphæricis, 6-7 μ . diam., germinationis ope sèpius piriformibus v. clavatis et demum, more solito, constrictionis ope cellulas filias generantibus vel hinc inde e peripheria gemmulas procreantibus; plasmate minute granuloso, corpuscula 1-2 v. plura refringentia continente.

Hab. in membrana tracheali pueri *scarlatina* laborantis in Germania. — Cultus capsulas non format, sed easdem profert in animalibus artificiose infectis.

CRYPTOCOCCUS Kütz. in Linnæa VIII (1833) p. 365, em. Vuill. ex Guéguen, Champ. paras. pag. 106, *Atelosaccharomyces* Beurm. et Goug. (1910) (Etym. *cryptos* abditus et *coccus* pro semen seu spora). — Genus temporarie colligit *Saccharomyctis* species ascis (hucusque) ignotis (*).

1. **Cryptococcus degenerans** (Roncali) Vuill. in Guég., l. c. p. 107, 5922 f. 6. — Cellulis subrotundis, rarius ovoideis, v. reniformibus, tunica tenui demum spissa; protoplasmate initio refringente et homogeneo, postremo vacuolato et parce granuloso.

Hab. in ganglis axillaribus feminæ cancere mamillari affectæ inque aliis tumoribus in Italia, Gallia (RONCALI). — Quoad notas biologicas et pathologicas cfr. Guéguen l. c.

2. **Cryptococcus Costantini** Guéguen, Champ. paras. p. 114, *Saccharomyces hominis* Cost. — Cellulis globosis; a *Crypt. lithogene* distinguuntur coloniis senescendo non brunnescensibus et a *Crypt. tumefaciens* tunicis in mediis communibus non se incrassantibus.

Hab. in carcinomate mamillari feminæ in Gallia (CONSTANTIN).

3. **Cryptococcus Rogerii** Sartory et Demanche, Bull. Soc. Mycol. Fr. 5924 XXIII (1907) p. 179. — Cellulis elongatis subovoideis, 8-10 \times 2-3, ut *Saccharomyces* germinantibus, temp. opt. 30-35°C.

Hab. in pure ex peritonitide feminæ ægrotæ, Parisiis. — Segregat invertinam, inducit fermentationem alcoholicam, scindit glycosium et maltosum; coagulat lac; præcipitat caseinam; inoculatus in leporem est pathogenus.

(*) Non paucæ ex præcedentibus speciebus adhuc non ascophoræ inventæ huic ducendæ essent. Cfr. quoque *Torulopsis* Berl.

4. **Cryptococcus Gilchristi** Vuill. in Guég., Champ. paras. pag. 108, 5925 fig. 7. — Cellulis rotundis v. subovoideis, 16 μ . diam., tunica 3 μ . cr. præditis, 1-vacuolatis, germinantibus.

Hab. in scrofulodermatite, pseudolupo etc. hominis in America boreali (GILCHRIST). — Notas biolog. et pathol. vide apud Guéguen l. c.

5. **Cryptococcus Plimmeri** Costantin apud Guéguen, Champ. paras. 5926 p. 112. — Cellulis subrotundis, 4-10 μ . diam., germinantibus liberis v. intracellularibus, solitariis v. 2-60 congregatis; tunica bistratosa, zona peripherica hyalina.

Hab. in carcinomatibus humanis in Germania (PLIMMER). — Quoad characteres biológicos et pathológicos cfr. Guéguen l. c.

6. **Cryptococcus hominis** Vuill. apud Guég., Champ. paras. p. 109, 5927 f. 10. — Cellulis subrotundis, subinde ovoideis, tunica spissa præditis, germinantibus et saepe per 2 v. 3 aggregatis, contentu homogeneo 1-2 nucleos valde refringentes includente.

Hab. in periostite chronica tibiae hominis in Germania (BUSSE). — Quoad characteres biolog. et pathol. cfr. Guéguen l. c.

7. **Cryptococcus salmoneus** Sartory, C. R. Soc. de Biol. (1906) et 5928 Bull. Soc. Myc. Fr. XXIII (1907) p. 28 (absque diagn.). — Coloniis in culturis varie roseis; cellulis sphæroideis, levibus, 6-8 μ . diam., sicut in *Saccharomyces* gemmantibus; evolutionis optimum temp. 22°-25°C; ascosporis nullis visis.

Hab. in succo gastrico hyperacido hominis ægrotis, Parisiis.

8. **Cryptococcus linguæ-pilosæ** (Lucet) Vuill. ap. Guéguen, Champ. 5929 paras. pag. 110, fig. 11. — Cellulis ovoideis 3-6 μ . long., tunica tenui, protoplasmate hyalino granulis refringentibus prædicto.

Hab. in lingua pilosa nigra hominis in Gallia (LUCET). — Quoad charact. biol. et pathol. cfr. Guéguen l. c.

9. **Cryptococcus lithogenes** (Sanfelice) Vuill. ap. Guéguen, Champ. 5930 paras. p. 111, fig. 12. — Cellulis pro more subglobosis, forma et magnitudine ludibundis, tunica plus minus spissa, subinde capsulâ hyalinâ inclusis, modo guttulas refringentes foventibus, modo masulas rotundo-angulosas calcareas includentibus.

Hab. in gangliis lymphaticis bovis carcinomate necati in Italia (SANFELICE). — Quoad charact. biol. et pathol. cfr. Guéguen l. c.

10. **Cryptococcus granulomatogenes** (Sanfelice) Vuill. ap. Guéguen, 5931 Champ. paras. p. 111. — Cellulis subglobosis v. leviter ovoideis,

magnitudine variis, contentu modo homogeneo, modo vacuoloso, nucleo centrali refringente præditis, germinantibus.

Hab. in nodulis pulmonum Suis scrofæ, cui noxius, in Italia (SANFELICE). — Quoad char. biol. et pathol. cfr. Guéguen l. c.

11. **Cryptococcus clava** Wedl in Sitzungsb. K. Akad. Wiss. Wien, 5932 XXIX (1858) pag. 91, cum icone. — Cellulis exilibus, elongatis, hyalinis, uno apice leviter clavulato-incrassatis, 30-40 \times 2-3 (apice crassiore), ceterum vix 1 μ . cr., contentu homogeneo, valde refringente, saepe guttulato sed nucleo distincto nullo præditis, apice crassiore gemmulas 1-2, quarum alteram saepe tenuiorem exerentibus; cellulis saepius in catenam connexis.

Hab. in stomacho Bovis in Austria.

12. **Cryptococcus Gotti-Brazzolæ** Guéguen, Champ. paras. pag. 113, 5933 fig. 13. — Cellulis magnitudine variis, sphæricis vel subovoideis, contentu granuloso, membrana distincte dupli capsulaque hyalina, homogena v. stratosa obtectis.

Hab. in myxosarcomate fossarum nasalium vaccæ, in Italia (GOTTI et BRAZZOLA). — Notas biol. et pathol. vide apud Guéguen.

13. **Cryptococcus Tokishigei** Vuill. in Guég. Champ. paras. p. 108, 5934 fig. 8. — Cellulis ovoideis utrinque acuminatis, solitariis, raro apice germinantibus, 3,7-4 \times 2,4-3,6, tunica 1 μ . cr., contentu granuloso, centro nucleato.

Hab. in farcimine seu morva equorum in Japonia (TOKISHIGE). — Notas biolog. et patholog. cfr. apud Guéguen l. c.

14. **Cryptococcus farciminosus** Rivolta et Micellone apud Guéguen, 5935 Champ. paras. p. 109, fig. 9. — Cellulis subrotundis v. ovoideis, interdum utrinque acuminatis, saepe germinantibus, variae magnitudinis, plerumque 3-4 μ , tunica modo tenui, modo spissa, contentu saepius granuloso.

Hab. in farcimine (lymphangite) equi, muli et asini in Italia, Gallia, Africa (RIVOLTA). — Quoad notas biolog. et pathol. cfr. Guéguen l. c.

15. **Cryptococcus niger** Vuill. ap. Guéguen, Champ. paras. p. 112, 5936 — Cellulis globosis v. ovoideis, tunica sat spissa præditis, germinantibus et 2-3-connexis; plasmate centrali granum nucleiforme versiforme includente.

Hab. in myxomate pulmonari Caviae ex inoculatione hepatis foeti tuberculotici in Italia (MAFFUCCI et SIRLEO). — Quoad notas biol. et pathol. cfr. Guéguen l. c.

16. **Cryptococcus parasitarius** (Trab.) Guéguen, Champ. paras. p. 115. 5937
 — Cellulis subrotundis, 3-4 μ . diam., guttulis refringentibus re-
 fertis, germinantibus.

Hab. in *Acridio peregrino*, socio *Lachnidio* (Fusario) *Acri-*
diorum in Algeria (TRABUT).

17. **Cryptococcus Anobii** Guéguen, Champ. paras. p. 115, fig. 16. — 5938
 Cellulis piriformibus v. clavatis, 4,5 \times 3, extremitate acutiore ger-
 minantibus, contentu protoplasmatico granulis refringentibus plu-
 rimis, circa vacuolum centrale dispositis referto.

Hab. in cellulis intestini larvarum *Anobii panicei* ubi nor-
 maliter vivit, in Germania (W. KARAWAIEW et ESCHERICH). —
 Notas biologicas cfr. in Guéguen l. c.

18. **Cryptococcus Kleinii** Er. Cohn ap. Guéguen, Champ. par. p. 114, 5939
 fig. 15. — Cellulis globulosis, 2-6 μ . diam., contentu homogeneo
 minute granulato, tunica tenui capsulâ hyalina, diametri totalis
 quartam partem occupante obvoluta.

Hab. in culturis variis, sociis aliis organismis pathogenis, in
 Germania (KLEIN). — Quoad charact. biol. et pathol. cfr. Gué-
 guen l. c.

19. **Cryptococcus Bainieri** Sartory, C. R. Soc. Biol. LVIII, 2 (1906) 5940
 p. 216. — Cellulis ovoideis v. ellipsoideis, levibus, 6-11 \times 4, more
 solito gemmantibus; coloniis intense roseis; evolutionis tempera-
 tura optimum 24-25°C; ascis hucusque ignotis.

Hab. saprophyticus ad folia maculata subputrida Urticæ in
 Gallia (G. BAINIER). — In cultura liquida cellulæ superficiales lon-
 giores et crassiores fiunt.

- PSEUDOSACCHAROMYCES** Br. et Farn. in Atti Ist. botan. Pavia X
 (extr. 1906) pag. 31 (Etym. *pseudes* falsus et *Saccharomyces*). —
 Cellulæ saccharomycetiformes, gemmantæ, ellipsoideæ, hyalinæ,
 deinde brunneæ, intus granulosæ, in acervulos simplices v. ramo-
 sos congestæ. — Genus omnino spurium.

1. **Pseudosaccharomyces Citri** Br. et Farn., l. c. t. VIII, f. 1-2. — 5941
 Characteres generis.

Hab. in fructibus Citri Limonis morbo s. d. *ruggine bianca*
 deturpatis, in Sicilia. — Cellulæ 11,5 \times 9.

- MYCODERMA** Pers., Myc. Eur. I, p. 96 (1822) ex p., Desm., in Ann.
 Sc. Nat. I sér. X (1827) p. 59, em. Will et Leberle. Cfr. Leberle,
 Beiträge zur Kenntn. der Gattung Mycoderma, Münch. 1909

(Etym. *myces* fungus et *derma* pellis). — A *Saccharomyce* rite dignoscitur quia ascos et sporidia non generat, fermentationem aceticam non alcoholicam inducit, pelliculas membranaceas superficiales generat, præterea quia constat e cellulis junioribus irregulariter globoso-cuboideis, subtruncatis, numquam exakte globosis v. acutis, demum longiuscule catenatis, breviter cylindraceis, senioribus vacuolis 1-3 et guttulis oleosis 1-3 præditis; cellulis giganteis præsentibus. (Vulgo *Fiori del vinò*, *della birra*, *Kahmhaut*, *Fleurs de vin* etc.). — Præter speciem in vino *Mycoderma vini* Desm. (= *Saccharomyces Mycoderma* Rees — Syll. VIII, p. 917, ex parte), sequentes species fuse describit cl. Leberle, quarum tantum nonnullas notas morphologicas hic afferimus.

1. ***Mycoderma cerevisiae*** Desm., l. c. em. Hansen, Leberle l. c. p. 73. 5942
— Cellulis germinatis cylindraceis, 7-10 \times 2-3, longiuscule dendroideo-catenulatis; cellulis giganteis variis; evolutionis lentæ temperatura optimum 20-25°C; gelatinam solanaceam et betaceam fluidificat.

Hab. in cerevisia. — Var. *C* Leberle, l. c. pag. 74: differt cellulis germinatis ex ovoideo cylindraceis, 6-10 \times 2-4, evolutionis rapidæ temperatura optimum 20-25°C. — In cerevisia.

2. ***Mycoderma validum*** Will, Centralbl. f. Bakter. II Abt. XXVIII 5943 (1910) p. 30. c. ic., Leberle, l. c. pag. 73. — Cellulis germinatis cylindraceo-ovoideis, 6-8 \times 2-4, junioribus saccharomycetoideis, senioribus dendroideo-catenulatis; cellulis giganteis valde evolutis; evolutionis vividæ temperatura optimum 20-25°C; gelatinam non fluidificat.

Hab. in Cerevisia vitiata. — Copiose assimilat glycosium, levulosium nec non acidum lacticum; oxydat alcohol ethylicum.

3. ***Mycoderma gallicum*** Will, Centralbl. f. Bakt. II Abt. XXVIII 5944. (1910) p. 30, c. ic., Leberle l. c. p. 74. — Cellulis germinatis ex ovoideo cylindraceis, 7-10 \times 2-3, dein dendroideo-catenulatis; evolutionis vividæ temperatura optimum 20-25°C; coloniis giganteis peculiaribus; gelatinam solanaceam et betaceam fluidificat.

Hab. in cerevisia vitiata. — Assimilat glycosium et levulosium, cetera ut in *Mycoderma cerevisiae*.

4. ***Mycoderma decolorans*** Will, Centralbl. f. Bakter. etc. II Abt. 5945 (1910) p. 30. — Cellulis plerumque 8-11 \times 5 e cylindraceo subconoideis, medio constrictulis, ovoideis, apice subapplanatis v. subapiculatis; oxydat fortiter alcohol ethylicum.

Hab. in cerevisia vitiata.

5. **Mycoderma saprogenes-Sake** Takahashi, Bull. Coll. Agric. Imper. 5946
Univ. Tokyo VII (1907) p. 101.

Hab. in fermento vitiato Sake in Japonia. — Gradui elato alcoholis resistit et illud fortiter oxydat cum formatione acidi carbonici et aquæ.

6. **Mycoderma Humuli** Lasché, Der Braumeister, Chicago (1891) p. 293 5947
et **Mycoderma rubrum** Lasché, l. c. quæ colore rubente et multiplicationis forma peculiari utuntur, teste Leberle, l. c. p. 20 non
v. vix spectant ad genus *Mycoderma*.

02

CICADOMYCES Karel Sulc, Pseudovitellus etc. in Sitzb. Kgl. Böh. Ges. Wiss. Prag (1910) pag. 11, extr. fig. VI-VII (Etym. *Cicada* et *myces*). — Cellulæ maxime versiformes, subglobosæ, ellipsoideæ, nunc uno apice truncatæ, nunc rectæ, nunc inæquilateræ, nunc curvatæ, variæ magnitudinis, in series tortuosas breves per connectiva filiformia junctæ, plasmate homogeno, granulis (nucleis ?) 1-3 prædicto farctæ.

1. **Cicadomyces Ptyeli-lineati** Kar. Sulc, l. c. — Charact. generis; cel- 5948
lulis 6-10 μ . long., granulis (nucleis ?) 1-2 μ . diam., subrotundis
vel angulosis.

Hab. in cellulis medullaribus larvæ Ptyeli lineati ex Homopteris in Bohemia. — Var. II Sulc., l. c. pag. 14, f. VIII. — A typo differt cellulis multo minoribus; circ. 3 μ . long. et connectivis brevissimis. — In iisdem larvis.

2. **Cicadomyces Aphalaræ-Calthæ** Karel Sulc, l. c. pag. 20, fig. XI, 5949
extr. — Cellulis plerumque rhombeis v. trigonis v. elliptico-rhombeis, c. 10 μ . diam. connectivis filiformibus plus minus longis junctis, plasma granulosum et corpuscula peregrina numerosa foventibus, etiam divisione cruciata, ut videtur, se multiplicantibus.

Hab. in cellulis medullaribus larvæ Aphalaræ Calthæ ex Homopteris in Bohemia.

3. **Cicadomyces Liberiæ** Buchner, Stud. intrac. Lymb. in Arch. Pro- 5950
tist. Jena (1912) pag. 101, t. 9. — Affinis *Saccharomycti Cicadarum*; cellulis ovoideis, globulosis v. polymorphis, conglomeratis, 3-8 μ . long.

Hab. in Cicadæ spec. partibus periphericis mycetomatis in Liberia Africæ.

4. **Cicadomyces minimus** Buchn., l. c. p. 102, t. 9. — Cellulis mini- 5951
mis, 1,5-3 μ . diam.

Hab. cum priore in Liberia.

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5. **Cicadomyces rubri-cinctus** Buchn., l. c. p. 103, t. 11. — Cicado- 5952
mycti *Aphrophoræ-Salicis* similis; cellulæ versiformibus plasmate
denso farctis, in mycetomate epithelio rubente cincto nidulantibus.
Hab. in *Aphrophora Salicis* in Germania.
6. **Cicadomyces Aphrophoræ-Salicis** K. Sulc 1910, ap. Buchner l. c. 5953
pag. 102, t. 11. — In interiore mycetomatis nidulans; cellulæ in
larvis maturis crassioribus et brevioribus, in insectis perfectis glo-
bosis v. ovoideis, divisione transversa se multiplicantibus, plasmate
demum vacuolato.
Hab. in mycetomate *Aphrophoræ Salicis* in Bohemia et
Germania. — Adest alia generis species **Cicad. Aphrophoræ-Alni** K.
Sulc vocata, sed nec ab hoc auctore neque a Buchner l. c. p. 103
descripta.
7. **Cicadomyces minor** Buchner, l. c. p. 103. — Cellulæ 3 μ . diam., 5954
germinando cuneatis, vacuolatis.
Hab. in mycetomate, inter granula flavo-ochracea, Ptyeli li-
neati in Germania.
8. **Cicadomyces dubius** Buchner, l. c. p. 104, t. 5, f. 8. — Cellulæ 5955
densissime glomeratis, minutis.
Hab. in parte centrali mycetomatis Psillideæ cujusdam in
Fraxino, in Germania.

SCHIZOSACCHAROMYCES Lindner (non Beijerinck) — Syll. XI p. 458, XIV p. 828, XVIII p. 201.

1. **Schizosaccharomyces Aphidis** K. Sulc, Pseudovitellus etc. in Sitzung. 5956
K. Böhm. Gesellsch. Prag. (1910) p. 22, fig. XIV extr. — Cel-
lulæ subglobosis v. ellipsoideis 4 μ . diam., copulatione in series
breves conjunctis, plasma granulosum cum vacuolis et 1-2 nucleis
continentibus, gemmipare vel divisione transversali se multipli-
cantibus.
Hab. in corpore *Aphidis* ?amenticolæ aliorumque Aphi-
dum in Bohemia.
2. **Schizosaccharomyces Aphalaræ-Calthæ** Karel Sulc, l. c. p. 30, f. XII. 5957
— Cellulæ perfecte globosis, 4 μ . diam., subinde uno polo minute
apiculatis, solitariis dein copulatione 2-3 plerumque in formam te-
tradis conjunctis, demumque per divisionem radiatam se multipli-
cantibus.
Hab. in cellulæ medullaribus larvæ *Aphalaræ Calthæ* in
Bohemia.

3. **Schizosaccharomyces Psyllæ-Försteri** K. Sulc., p. 21, fig. XIII. — 5958
Cellulis regulariter ellipsoideis, mox copulatione 2-4 conjunctis,
demum per divisionem se multiplicantibus.

Hab. in cellulis larvæ *Psyllæ Försteri* in Bohemia.

4. **Schizosaccharomyces Chermetis-strobilobii** K. Sulc., l. c. p. 22, f. XV, 5959
extr. — Cellulis subsolitariis, exiguis, fusoideis, rectis curvulivis
utrinque obtuse acutatis, vix 1-2 μ . long. plasma granulosum cum
vacuolis et nucleum singulum continentibus, gemmipare v. divi-
sione transversali se multiplicantibus.

Hab. in corpore *Chermetis (Gnaphalodes) strobilobii* in
Bohemia.

5. **Schizosaccharomyces Chermetis Abietis** K. Sulc., l. c. p. 23, extr. — 5960
Cellulis exiguis, 1-2 μ . long., cylindraceis et utrinque rotundatis,
1-nucleatis, divisione transversali tantum se multiplicantibus.

Hab. in corpore *Chermetis Abietis* in Bohemia. — *Schi-*
zosaccharomycti Pombe affinis dicitur.

6. **Schizosaccharomyces Drepanosiphi** Buchner, Stud. intrac. Symb. 5961
in Arch. Prot. Jena (1912) p. 98, t. 1. — Cellulis globulosis exi-
guis sed variae magnitud., 2-4 μ . diam. (in ovis), solitariae v. schi-
zogenetice binis-ternis, plasmate granuloso.

Hab. in *Aphidibus (Drepanosiphis)* in Germania.

7. **Schizosaccharomyces Sulci** Buchn., l. c. p. 100, t. 8, *Cicadomyces* 5962
Sulci Buchn. olim.

Hab. in cellulis adiposis *Cicadæ* sp. in Japonia. — Cellulæ
globosæ, circ. 3 μ . diam. in ovis, dein schizogenetice constricto-
didymæ, varie guttulato-nucleatae.

- SCHWANNIOMYCES** Klöcker, C. R. Trav. Labor. Carlsberg VII vol.
4 livr. (1909) p. 271, fig. 4-6 (Etym. a celebri THEOD. SCHWANN).
— Sporidia seu endosporæ membrana simplici, extus sparse et
minutissime verruculosa et lineola anuliformi æquatoriali percursâ
prædita.

1. **Schwanniomyces occidentalis** Klöcker, l. c. pag. 275, fig. 4-6. — 5963
Cellulis plerumque ellipsoideis vel spheroideis 5-10 μ . cr., raro
suballantoideis, temperatura gemmationis 3,5°-38°C; endosporis
subellipsoideis 3-4,5 μ . long. uniguttulatis, singulis in quaque cel-
lula rarissime duabus, minutissime verruculosis et æquatorialiter
lineolatis.

Hab. ad terram ex ins. St. Thomas Antillarum danicarum. —
Fermentationem alcoholicam inducit.

DEBARYOMYCES Klöcker, C. R. Trav. Labor. Carsberg VII v., 4 livr. (1909) p. 271, fig. 1-3 (Etym. ab illustri ANT. DE BARY). — Endosporæ seu sporidia membrana simplici, extus sparse et minute verruculosâ prædita.

1. **Debaryomyces globosus** Klöcker, l. c. p. 273, fig. 1-3. — Cellulis 5964 constanter globosis v. subglobosis 4,5-5 μ . diam.; endosporis globulosis in quaque cellula (asco) una rarissime duabus, 2-3,5 μ . d., uniguttulatis, temperatura sporificationis 14°-36°C, gemmationis cellularum 5°-43°C.

Hab. ad terram ex ins. St. Thomas Antillarum danicarum. — In cerevisia fermentationem alcoholicam inducit.

NADSONIA Syd. Ann. Mycol. X (1912) p. 348, *Guilliermondia* Nadson et Konokotine in Bull. du Jard. imp. de Botanique de St. Petersbourg, XI (1911) p. 142 c. fig., non Boudier (1904). (Etym. a cl. Prof. G. A. NADSON petropolitano). — Cellulæ ovoideæ, ellipsoideæ vel citriformes, amycelicæ. Asci e copulatione heterogamica duarum cellularum per apiculos conjugatarum oriundi, globosi, monospori, rarius breviter ellipsoidei bispori. Sporidia perfecte sphærica episporio minutissime asperulo, flavo-brunneolo prædita et guttula oleosa, crassa, globosâ fœsta. — Generi *Debaryomyceti* affinis sed sporogenesis diversa.

1. **Nadsonia fulvescens** (N. et K.) Syd, l. c., *Guill. fulvescens* Nadson 5965 et Kon. l. c. p. 143, fig. 1-40. — Coloniis diu albis, denique ascigeris et tunc e rubescenti flavidò-brunneolis; cellulis 6-8 \approx 4, initio minute granulosis, hyalinis, post sporogenesim vacuis; ascis 7-8 μ . diam., rarius 8-9 \approx 6-7; sporidiis in asco monosporo 6 μ . diam., in ascis bisporis 4 μ . diam.

Hab. in fluxo mucoso canis, Petropoli Rossiae. — Cellulæ vegetativæ gemmipare multiplicantur.

WILLIA E. Chr. Hansen — Syll. XVIII, pag. 198 — (Etym. a cl. prof. H. WILL, monacensi). — Huc quoque ducenda: *Willia Saturnus* (A. Kl.) E. Chr. Hans. — Syll. XVIII, pag. 198 et 200 (*Saccharomyces*).

1. **Willia Wichmanni** Zikes, Centralbl. f. Bakter. II Abt. XVI (1906) 5966 p. 97. — Cellulis 3-5 \approx 3, in membrana (griseo-alba) usque ad 6-40 μ . long.; ascis 2-4-sporis; sporidiis pileiformibus costulatis, 2 μ . diam. (dempta costula); optimum evolutionis 22°C; ætherem acetum efformat, adsimilat dextrosium et levulosium sed lente.

Hab. culta in substantiis variis ex terra provenientibus.

2. **Willia anomala** E. C. Hans. — Syll. XVIII, p. 198 et XI p. 457 — 5967
 var. *belgica* Lindn., Mikrosk. Betriebskontr. 3. Aufl. (1898) p. 382
 (Saccharom.), *Will. belgica* (Lindn.) Zikes, Centralbl. f. Bakt. etc.
 II Abt. XVI (1906) p. 98. — Cellulis minutis, variis, vacuis, te-
 nuiter tunicatis; endosporis pileiformibus, distincte acute costulatis.

Hab. in cerevisia belgica. — In musto pelliculam punctata-
 tam format; ætherem æthylicum non generat.

- PICHLA** E. Chr. Hans. — Syll. XVIII, p. 198 (Etym. a cl. prof. P.
 PICHI, Scholæ œnologicæ Conelianæ). — Huc quoque ducenda *Pi-*
chia membranifaciens C. H. Hans. — Syll. l. c. et VIII, p. 918.

1. **Pichia farinosa** Lindn. Mikrosk. Betriebskontr. IV ed. p. 426, Guil-
 lierm. in Ann. mycol. (1910) p. 296, fig. 10. — Cellulis cylindra-
 ceo-fusoideis, breviter catenulatis, utrinque obtusulis, per processus
 laterales binas cellulas conjungentes se copulantibus, denique nu-
 cleos quaternos (sporidia) 1-seriatos, globosos foventibus.

Hab. in fermentis Sojæ aliisque.

ZYGOSACCHAROMYCES Barker — Syll. XVI p. 818, XVIII p. 198.

1. **Zygosaccharomyces japonicus** Saito, Bot. Magaz. XXIII, pag. 96 5969
 (1909), Guilliermond in Ann. Mycol. VIII (1910) p. 293, f. 7. —
 Cellulis globosis v. globoso-piriformibus, in appendiculam cylindraceam plerumque productis et binis per eam se zygotice conjun-
 gentibus, sparsis v. glomeratis, intus 1-4 nucleos (sporidia) gene-
 rantibus.

Hab. in fermento Sojæ in Japonia. — Ex cellularum conju-
 gatione ad hoc genus spectat, sed ceteræ notæ ulterius inquirendæ.

2. **Zygosaccharomyces Priorianus** Klöker, Die Gärungsorgan. in Theo-
 rie und Praxis der Alkoholgärungsgewerbe, 2 Aufl. Stuttgart,
 (1906), Guill. in Ann. Mycol. VIII (1910) pag. 294, f. 8-9 — A
Zygosaccharomyces japonico differt (ex icone cit. Guill.) imprimis
 cellulis numquam in appendiculam cylindraceam productis, ibidem
 denique nucleos (sporidia) 2-4 globosos includentibus.

Hab. in fermentatione alcoholica.

3. **Zygosaccharomyces lactis** W. Dombrowski, Centralbl. f. Bakt. etc. 5971
 II Abt., 28 Bd. (1910) p. 371, cum icon. — Cellulis sphæroideis
 plerumque 4-5 μ. diam.

Hab. in lacte fermentescente.

- Genera et species dubia v. inquirenda.
- Cfr. Leberle, l. c. pag. 20-21, Sulc, l. c. et Buchner, l. c.
- Endoblastoderma amycoïdes** Fischer u. Brebek, Zur Morphologie, Biologie u. Systematik d. Kahnpilze, d. *Monilia candida* Hans. und d. Soorerregers, Jena G. Fischer (1894), 52 pp. cum 4 tab. 5972
- Endoblastoderma pulverulentum** (Beijer.) Fisch. u. Brebek, l. c. 5973
- Blastoderma salmonicolor** Fischer u. Brebek l. c. 5974
- Glukomyces** Beijerinck, Centralbl. f. Bakter. etc. I Abt. Bd. XI (1892) p. 68. 5975
- Kermincola kermesina** K. Sulc. in S. B. böhm. Ges. Wiss. Prag (1906), 5976
Buchner, Stud. intracell. Symbionten in Arch. Protistenk. Jena (1912) p. 94, f. 19.
- Hab.* in Kermete Quercus ex Coccidiis, in Bohemia. — Cellulæ cylindraceæ, apice subacutæ, 1-3-nucleatæ, 20 × 4; mycelium nullum.
- Kermincola physokermesina** K. Sulc., l. c. Buchner, l. c. f. 20. 5977
Hab. in Physokermete Abietis ex Coccidiis, in Bohemia. — Cellulæ lacrymiformes uno polo v. utrisque acutatæ, 10 × 3; mycelium nullum.
- Psyllidiomyces tenuis** Buchner, l. c. p. 97, t. V, f. 4-7. 5978
Hab. in cellulis adiposis et lymphæ Psyllidis cujusdam in Salice. — Cellulæ cylindraceæ plasmate granuloso farctæ, utrinque obtusulæ, longitudine varia, sed non indicata. Mycelium nullum.
- Lecaniascus polymorphus** Moniez, in Bull. Soc. zool. Fr. XII (1887), 5979
Buchner, l. c. p. 97.
Hab. in Lecanio Hesperidum in Gallia. — Cellulæ ovato-oblongæ, 4-5 μ. longæ. Mycelium 50-60 μ. long., hinc inde contractum. Asci (?) rariores, 40 μ. long., sporidiis ovoideo-oblongis referti.
- Aleurodomyces Signoreti** Buchner, l. c. p. 100, t. 4. 5980
Hab. in mycetocystis Aleurodis sp. in Germania. — Cellulæ globosæ v. ovoideæ sæpe deformatæ, 2-5 μ. long., plasmate granuloso et vacuolato.
- Coccidomyces Pierantoni** Buchn., l. c. p. 102. 5981
Hab. in mycetomate Iceryæ Purchasi ex Coccidiis. — Cellulæ (in culturis) 5 μ. diam., vacuolum unicum continentis.
- Coccidomyces Dactylopii** Buchner, l. c. p. 105. 5982
Hab. in mycetomate Dactylopii Citri in Germania. — Efformat vesiculas cystiformes in quibus cellulæ falciformes numerosissimæ, membrana magis diaphana cinctæ, nidulantur.

Fam. 18. Protomycetaceæ DE BARY

PROTOMYCES Ung. — Syll. VII p. 319, IX p. 363, XI p. 251, XIV p. 829, XVIII p. 202.

1. **Protomycetes Crepidis** (Jaap.) Sacc. et Trott., *Protomycopsis Crepidis* Jaap, Ann. Mycol. VI (1908) p. 204. — Pustulis parvis 0,5-0,75 mm., saepe punctiformibus, rotundatis, numerosis, sordide griseo-flavis, demum flavo-brunneis, in pagina inferiore hemisphaerico-prominentibus; sporis irregulariter globosis, 25-36 μ . cr., hyalinis v. pallide flavis; episporio 2-5 μ . cr., verrucis hyalinis crebris saepe lineariter elongatis tecto, contentu hyalino, granuloso.

Hab. in foliis vivis Crepidis incarnatae prope St. Ulrich et Penegal Mendelgebirge Austriae. — A *Pr. Leucanthemi* (Syd.) Magn. sporis multo minoribus omnino diversum.

2. **Protomycetes gravidus** Davis, Journ. of Mycol. XIII (1907) p. 188. — Sporis subepidermicis vel in zona vasculari ortis, numerosis, plerumque globosis vel etiam ellipsoideis, ovoideis vel polygoniis, 30-55 \times 27-40, plurinucleatis, superficie plus v. minus inaequali, episporio 1-3 μ . cr. brunneo; endosporis maturis 3-5 μ . crassis, hyalinis.

Hab. in ramis, petiolis et nervis plus minusve hypertrophicis *Bidentis cernuae*, *B. connatae*, *B. frondosae* in America boreali.

3. **Protomycetes ? Gaillardiae** Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 284. — Maculis obsoletis orbicularibus indeterminatis, amphigenis vix incrassatulo-prominulis, opacis, 2-5 mm. diam., fuscidulis, saepe areola pallescenti cinctis; sporis solitariis in quaque matricis cellula, globosis, 30-35 μ . diam., crassiuscula tunicatis, levibus, pellucidis, pallide rufescensibus, eguttulatis.

Hab. in foliis vivis Gaillardiae Donianae in pratis circa Metan, Salta Amer. austr. — An oogonia *Peronospora* v. *Cystopodis* cuiusdam?

4. **Protomycetes (?) persicifilus** Speg., Rev. Ministerio Agric. Buenos Aires II (1908) n. 2, pag. 39, Nota, cum icon. — Maculis effusis tumidulis, subtorulosis, flavescenti-aurantiacis; sporis in cellulis subepidermicis hypertrophicis parum deformatis, solitariis, globosis, 20-25 μ . diam., crassissime tunicatis, levibus, grosse 1-nucleatis, endoplasmate nubiloso.

Hab. in ramulis Persicæ vulgaris quos hypertrophycos reddit, prope La Plata Rep. Argentina. — Forsan inter Chytridaceas locandus.

5. **Protomyces radicicola** Zopf, Pilze in Schenk, Handb. IV, p. 280, 5987 f. 4, Wildeman Mém. Soc. Belg. Microscop. XVII (1893) p. 28, t. 2, f. 26-29 et t. 3, f. 26-30. — Mycelio tenui, filiformi, parce ramoso, 4-7 μ . cr., septato, ex exteriore radicis oriundo et inter celulas matricis penetrante, ibique ramoso; ramis anastomosantibus et appendiculas (haustoria) exerentibus, hinc inde acrogene v. intercalariter se globoso-inflantibus et sporas generantibus; sporis globulosis (sporangiis ?) 28 μ . diam. v. (principue intercalaribus) ovato-ellipsoideis, tunica crassa, flava, contentu plus minus refringente.

Hab. in radicibus Stiftiæ chrysanthæ cultæ in Germania et Limosellæ aquatice in Belgio. — Germinatio sporarum nondum observata.

VOLKARTIA R. Maire, Bull. Soc. bot. de Fr. t. LV (1908) p. CXLV (Etym. a Doct. A. VOLKART botanico helveticō). — Sporangia subepidermica, membranâ incrassata, dupli prædita; sporangii maturi membrana externa disrupta, interna sporis repleta protrudente et sacculum ascoideum efformante; sacculis ascoideis hymenium exoascoideum efformantibus.

1. **Volkartia rhætica** (Volk.) R. Maire l. c. pag. CXLVII, *Taphrina* 5988 *rhætica* Volk. — Syll. XVIII, p. 197. — Hypophylla v. amphigena, in foliis plagas bullatas, flavovirentes vel subcarneas efformans; sporangiis subepidermicis, globosis v. subglobosis, 10-25 μ . diam.; sacculis ascoideis ovoideis, oblongis v. cylindraceis, 60-120 \times 15-25; sporis primitus sphæroideis, dein oblongis vel oblongo-linearibus, rectis v. curvulis, utrinque rotundatis, continuis, hyalinis, 1-2-guttulatis, 4-7 \times 1-2; mycelio intercellulari.

Hab. in foliis Crepidis pygmææ, blattarioidis, succisæ foliæ in Pyreneis Galliæ et montibus Helvetiæ.

TAPHRIDIUM Lag. et Juel. — Syll. XVIII p. 202.

1. **Taphridium Cicutæ** Lindroth, Mykol. Mitteil. 11-15, in Acta Soc. 5989 pro Fauna et Fl. fenn. XXVI (1904), p. 9, c. ic. — Mycelio hyalino, intercellulari, in mesophyllo late effuso et pustulas rotundatas plus minusve rubidas 1 mm. v. plura longas efformante; celulis mesophylli hypertrophicis et tunc 45-135 \times 70-90, rotundato-

ellipsoideis; sporis numerosis, massa sporarum pallidissime flavovirenti; sporis singulis hyalinis, elongatis, 4-7 \times 1,2-1,8.

Hab. in foliis vivis Cicutæ virosæ, Rossia bor. et Fennia.

2. **Taphridium Umbelliferarum** (Rostr.) v. Lagerh. et Juel — f. **He-** 5990
raclei Jaap, Verh. Bot. Ver. Prov. Brand. L (1908) p. 30 (nomen ¹² nudum).

Hab in Heracleo Sphondylio prope Putels Grödner Tal
Tiroliæ merid.

MONASCUS Van Tiegh. — Syll. IX p. 373, XIV p. 825.

1. **Monascus Barkeri** Dang., Le Botaniste X (1907) p. 178, t. 32-38, 5991
Kuyper in Ann. Mycol. III (1905) p. 43, tab. II, f. 13-27 (expositio tantum cyto-biologica).

Hab. ex culturis in Asia orient. peractis ad præparationem fermenti cujusdam *Samsu* dicti pro spiritu vini. Cultus quoque in Britannia et Gallia. — Sporangia (?) subglobosa, tunica subanhista; ascus octosporus; sporidia ovoidea rubenti-brunnea, 4-8 μ . long. — Cfr. Barker in Ann. of Bot. XVI (1903) p. 167, tab. XII-XIII.

2. **Monascus olei** Piedallu, in C. R. Acad. Sc. Paris (Aug. 1910) 5992
p. 397, *Mon. purpureus* Piedallu, ibid. (févr. 1909), non de Went.
— Peraffinis *Mon. purpureo* de Went et *M. Barkeri*, a quibus differt præcipue characteribus biologicis: evolutionis optimum temp. 30°-40°; germinatio usque ad 46°, nulla ad 47°; coloniis effusis ex albo roseolis v. subviolaceis, in substrato lacteo mox rubris.

Hab. in fundo dolii oleo, vulgo dicto japonico, referti et in coriis oleo perfectis in Gallia.

MYXOMYCETÆ ^(*)

Syll. VII p. 323, X p. 83, XI p. 462, XIV p. 831, XVI p. 819,
XVIII p. 208.

Fam. 1. Myxomycetaceæ WALLR.

BADHAMIA Berk. — Syll. VII p. 329, X p. 83, XVI p. 819, XVIII
p. 208.

1. **Badhamia foliicola** List., Journ. of Bot. XXXV (1897) p. 209, Tor- 5993
rend Myxom. p. 210, t. 6, f. 11. — Plasmodio flavo-aurantiaco;
peridiis subglobosis, subinde piriformibus, agglomeratis vel laxe
gregariis, 0,5-1 mm. diam., griseo-cyanis, sessilibus v. stipite te-
nui, 0,2-0,5 mm. longo præditis, brunneo-aurantiis, tunica calce
experte; capillitio albo, parcissime calcifero; sporis liberis v. in-
terdum 3-6-glomerulatis, violaceo-brunneis, 11 μ . diam., tenuiter
echinulatis.

Hab. in foliis emortuis, fragmentis variis etc. in Britannia,
Germania, Lusitania.

2. **Badhamia orbiculata** Rex, Proc. Philad. Acad. (1893) pag. 372, 5994
Macbride Slime Moulds p. 66, t. 14, f. 4, Torr. Myxom. p. 208,

(*) De hac singulari familia post sapientem ejus fundatorem J. ROSTAFIN-
SKI, eheu a septem lustris silentem, bene et ex professo tractaverunt ARTH.
LISTER, THOM. H. MACBRIDE, CAM. TORREND aliique; nunc vero (1911) opus ap-
paruit ceteris splendidius, nempe *A Monograph of the Mycetozoa*, II ed., ab ipso
ARTH. LISTER b. m. concoinnatam, adjuvante vero et edente ejus filia GULIELMA,
tabulis CCI pulcherrimis, plerisque coloratis, ornatam et absolutissimam. Omni-
bus qui in perdifficilis familiae studium incumbere velint opus Listerianum tu-
tissime commendamus.

Pars *Sylloges*, ad Myxomycetes spectans et jam senescentes, fere tota nunc
reficienda esset, sed optimis monographiis jam nunc, ut dixi, uti possumus. Hic
tantum damus non modo diagnoses specierum novarum sed, et non paucas, spe-
cierum in voluminibus præcedentibus fortuito omissarum.

t. VI, f. 12. — Plasmodio?; peridiis orbiculari-discoideis v. irregulariter elongatis et plasmodiocarpicis, 1 mm. circ. latis, saepe breviter stipitatis et tunc supra subumbilicatis; tunica grisea, saepe granulis calcareis farcta, deorsum brunnea; stipite nullo v. brevissimo, nigro, ruguloso; capillitio albo; sporis nigro-violaceis, tenuiter verrucosis, 12-15 μ . diam.

Hab. ad ligna emortua in America boreali.

3. *Badhamia rubiginosa* (Chev.) Rost. — Syll. VII, p. 334 — var. 5995 *globosa* List. ap. Torrend Myxom. p. 212. — Peridiis subglobosis, leniter depresso, 0,7 mm. diam., e griseo purpurascensibus; capillitio interdum parce calcifero; stipite atro-brunneo, 0,5-1 mm. long.; columella atro-brunnea, claviformi; sporis valide verrucosis v. reticulatis.

Hab. ad Muscos in Britannia et Hibernia.

PHYSARUM Pers. — Syll. VII p. 336, X 84, XI p. 462, XIV p. 831, XVI p. 819, XVIII p. 209.

1. *Physarum variabile* Rex, Proc. Philad. Acad. (1893) p. 371, Torr. 5996 Myx. p. 188. — Plasmodio?; peridiis totis 1 mm. alt., sparsis v. aggregatis, ovoideis v. piriformibus, interdum plasmodiocarpis sessilibus v. stipitatis, 0,4-0,5 mm. lat., rugosis, nitidulis, flavo-olivaceis, ochraceo-brunneis; tunica membranacea crusta calcarea flavicante et caduca secedente, irregulariter dehiscente; stipite longitudine et colore vario, 0,3-0,4 mm. longo, albo v. flavidio, subinde atro-brunneo, saepius olivaceo, granulis calcareis albis referto, capillitio e filamentis reticulatis, hyalinis, axillis dilatatis, nodulos calcareos albos v. flavidos conjungentibus; columella nulla v. subnulla; sporis minute verrucosis, atro-violaceis, 9-10 μ . diam. — var. *sessile* List., Journ. of Bot. (1898) tab. 385, fig. 2: peridiis omnino sessilibus.

Hab. cum var. ad ligna emortua in America boreali et australi et in Suecia.

2. *Physarum murinum* Lister, Mycetozoa p. 41, t. VII, f. B, ed. II, 5997 p. 50, t. 18, Torr. Myxom. p. 185. — Plasmodio?; peridiis globosis v. subglobosis, brunneo-griseolis v. murinis, sparsis v. gregariis, rugulosis; stipite 0,5 mm. alt. v. amplius, pallide brunneo, recto, subinde subfusoideo, fragili, granulis calcareis farcto; columella brevi, hemisphaerica v. obtuse conica; capillitii diu persistentes floccis hyalinis, nodulos calcareos copiosos pallide brunneos v.

flavos connectentibus; gleba brunnea; sporis brunneo-violaceis v. lilacinis, sublevibus, 6,5-10 μ . diam.

Hab. ad ligna emortua in Britannia, Suecia, Helvetia, Amer. bor. — *Var. Ravenelii* (Morg.) Torr. l. c. *Cytidium Ravenelii* Morg. Myx. Miami Valley, p. 82. — Nodulis calcareis flavis; stipite fu-soideo; sporis 6,5-7,5. — *Ad ligna in Amer. bor.*

3. *Physarum compactum* (Wing.) List. Mycetozoa p. 44, t. 10, f. B, 5998
 Torrend Myxom. p. 191, t. VI, f. 8, *Tilmadoche compacta* Wing.
 Proc. Philad. Acad. (1889) p. 48, *Lepidoderma stellatum* Massee,
 Myxog. p. 252. — Plasmodio?; peridiis totis 1-2 mm. altis, gregariis, globulosis v. infra applanatis, 0,5 mm. diam., rectis v. nuntantibus, albis v. griseo-brunneolis albo-maculatis, tunica membranacea, glomerulis calcareis innatis numerosis onusta, maturitate in 6-12 segmenta petaloidea dehiscente; stipite albo v. albo-flavido, subinde basi nigricante, 0,5-1,5 mm. alt., sursum tenuato, superne granulis calcareis farcto, columella e grumo granulorum calcareorum, supra apicem stipitis sito constante; floccis e grumo radiantibus, incoloribus, copiosis, parce calcareo-nodulosis, nodulis minutis fusoideis; gleba brunnea; sporis brunneo-violaceis, minute verrucosis, 7-8 μ . diam.

Hab. ad ligna putrida in Amer. bor. et centrali et Borneo.

4. *Physarum Betheli* Macbr. ap. Lister, Mycetoz. II ed. p. 57, t. 200. 5999 (1911). — Plasmodio; peridiis stipitatis, subglobosis, infra umbilicatis erectis v. inclinatis, 0,5-0,7 mm. diam., pallide sulphureis v. (ubi calce expertibus) iridescenti-violaceis; tunica membranacea granulis calcareis sulphureis plus v. minus copiosis farcta; stipite firme atro-brunneo v. nigro, 0,1-0,5 mm. alto; columella nulla; capituli floccis hyalinis, dense reticulatis, nodulis calcareis subinde ramosis pallide sulphureis inspersis; sporis violaceo-brunneis, minute verruculosis, 9-10 μ . diam.

Hab. ad ligna putrescentia, Colorado Amer. bor. — *Affine Physaro viridi* var. *incano*.

5. *Physarum psittacinum* Ditm. — Syll. VII, p. 341 — var. *fulvum* 6000 List., Journ. of Bot. XLIV (1906) p. 228, Torr. Myx. p. 195. — A typo dignoscitur tantum stipite basique peridii fulvis, nec æquilateriter aurantio-rubris.

Hab. ad trunco vetustos in Japonia.

6. *Physarum galbeum* Wingate in Ell. et Ev. N. Am. Fgi. n. 2491, 6001 Macbride Amer. Slime-Moulds p. 53, Torrend Myxom. p. 194. — Ab affini *Physaro flavicomodo* distinguitur peridiis aureo-flavis, gra-

nulis calcareis conspicuis inspersis; stipite pallide brunneo v. succineo, opaco nec non floccorum nodis minoribus; sporis sublevis, lilacinis v. violaceis, 7,5-10 μ . diam.

Hab. ad ligna emortua in America boreali.

7. **Physarum penetrale** Rex, in Proc. Philad. Acad. (1891) p. 389, 6002

List. Mycetoz. p. 49, t. XIV A, Torr. Myxom. p. 201, t. IX, f. 11.

— Plasmodio?; peridiis sparsis v. gregariis, rectis, ellipsoideis v. piriformibus, 0,5-0,7 mm. alt., 0,3-0,5 mm. lat., raro globulosis, griseis v. pallide flavo-viridulis; tunica membranacea, semidiaphana, granulis calceis pallide flavis v. griseolis inspersa, usque ad basim in segmenta 2-4 fatiscente; stipite variabilis, tenui, subulato diaphano, atro-rubro v. rubro-aurato, in columellam flavo-rubentem, acuminatam, $\frac{1}{2}$, peridii attingentem producto; capillitio copioso persistente, nodulis subrotundis flavis saepius calcareis insperso; gleba brunnea; sporis sublevis, violaceo-brunneolis, 5-7 μ . diam.

Hab. ad ligna emortua, Muscos, Pinorum folia etc. in America bor., Britannia, Germania, Lusitania.

8. **Physarum citrinellum** Peck, Rep. St. Mus. New Y. XXII (1879) 6003

p. 89, *Craterium citrinellum* (Peck) Lister, Mycetozoa p. 74, t. 28,

f. B, *Physarum cæspitosum* Schw. Syn. N. Am. Fungi pag. 258

(verisimiliter) — Syll. VII, p. 350 — Torr. Myxom. p. 192. — Plasmodio?; peridiis totis 1-1,5 mm. alt., subglobosis, gregariis v. sparsis, flavo-citrinis v. ochraceis, basi aurantio-tinctis; tunica duplii, exteriore cartilaginea, flava ex granulis calcareis copiosis rugulosa, ab interiore facile secedente; stipite cylindrico, 0,3-0,4 mm. long. valido, plicato, rubro-aurantio v. fuligineo, diaphano; capillitii floccis hyalinis, ramosis, nodulis latis calcareis albis praeditis, gleba nigra; sporis brunneo-purpureis fortiter echinulatis, 10-12 μ . diam.

Hab. ad ligna emortua et ad Muscos in Amer. bor. et in Japonia.

9. **Physarum carneum** G. Lister, Journ. of Bot. 48 (1910) p. 73. — 6004

Peridiis sparsis, stipitatis, subglobosis, 0,4-0,6 mm. diam., ochraceis, levibus v. rugulosis; pariete membranaceo, pallide flavo, cumulis calcareis granuliformibus, ad basim crassioribus consperso;

stipite rubro-carneo, diaphano, striato, calce carente, 0,2-0,3 mm. alto; columella minuta, conica aut nulla; capillitio dense reticulato-floccoso, floccis anguloso-ramosis hyalinis, calcareo-nodosis, ramis brevibus hyalinis connectentibus; sporis globosis, purpureo-brunneis, spinulosis, 8 μ . diam.

Hab. ad ligna putrida, Colorado Springs Amer. bor. (STRUGIS).

10. *Physarum nucleatum* Rex, Proc. Philad. Acad. (1891) pag. 389, 6005

Lister, Mycetoz. p. 49, Torr. Myxom. p. 191. — Plasmodio?; peridiis totis 1-2 mm. alt., sparsis v. gregariis, globulosis, rectis v. nutantibus, 0,5 mm. latis, albis; tunica membranacea, irregulariter dehiscente, glomerulis calcareis innatis v. inspersis praedita; stipite subulato, albo-flavido, rugoso, 1 mm. alto; columella nulla; capillitio niveo-albo, circa nucleus calcareum nitidum ad stipitis summitatem situm disposito, nodulisque minutis, albis, subrotundis praedito; gleba nigra; sporis brunneo-violaceis, minute echinulatis, 6-7 μ . diam.

Hab. ad ligna emortua in America boreali, Antillis, Japonia.

11. *Physarum nutans* Pers. — Syll. VII, pag. 359 (*Tilmadoche*) — 6006

var. β *violascens* Rost., Monogr. p. 114. — Peridio cyanescente v. violaceo, fragili, nutante, crusta calcarea superficiali nulla; stipite longiusculo; sporis 8-9 μ . diam. — var. γ *robustum* Lister, Mycetoz. p. 51. — Peridio granulis calcareis referto, persistente; stipite valido, recto, brevi v. nullo; capillitii nodis latioribus, 20-50 μ . diam., interdum in centrum peridii confluentibus; plasmadiocarpis non raris; sporis evidentiis verrucosis, 9-11 μ . diam.

Hab. ad caudices et ligna emortua, β in Germania et Lusitania, γ fere ubique.

12. *Physarum crateriforme* Petch, Ann. R. Bot. Gard. Peradeniya 6007

IV, Pt. V (1909) pag. 304. — Peridiis stipitatis, plasmodiis interdum accendentibus; capitulis crateriformibus 0,5-0,7 \approx 0,8-0,4 mm. v. sphæricis 0,5 mm. diam., subinde depressis, albis, pulvere calcareo-denso conspersis v. griseis, modo nudatis et iridescentibus; stipite opaco conico, infra nigro, sursum albido, 0,3-0,7 mm. long. 200 μ . basi cr., 80 μ . apice, in columellam densam, albam, producto, interdum columella nulla; nodulis calcareis ad apicem peridii extensis spinulas horizontales 80-100 \approx 20-40 ferentibus, membrana peridii hyalina granulos calcareos includente; sporis sphæricis dense spinulosis, violaceo-brunneis, 11-15 μ . diam.

Hab. in cortice vivo Artocarpi integrifolii, rarius in ramulis dejectis, Peradeniya Ceylon; ad trunco Araucariæ, Thuyæ etc. in Lusitania. — *Phys. nutanti* v. *leucophæo* proximum.

13. *Physarum vernum* Somm. ap. Fr. S. M. III, p. 146, sec. List., 6008

Mycetoz. II ed. p. 75, t. 48, *Badhamia verna* Rost. Mon. p. 145 ex p. — Plasmodio albo; peridiis sessilibus, subglobosis, interdum plasmadiocarpicis, oblongis, griseo-albis, 0,5-1 mm. diam., interdum

plura mm. longis, rugulosis; tunica membranacea, pro more granulis calcareis dense referata, interdum (calce absente) iridescente; capillitii floccis brevibus, hyalinis, nodulis copiosis, angulosis, albis connectentibus centroque pseudo-columellam sæpe formantibus; sporis purpureo-brunneis, spinulosis, 9-12 μ . diam.

Hab. in foliis ramisque dejectis in Britannia, Norvegia, Helvetia, Italia, Austria, Lusitania et Cuba. — *Badhamia verna* Rost. ex p. ad *Badh. paniceam* referenda est.

14. **Physarum testaceum** Sturgis, Colorado Coll. Publ. Gen. Ser. n. 30 6009

(1907) Science ser. XII, p. 18, Lister, Mycetoz. II ed. p. 79, t. 54.

— Plasmodio?; peridiis sessilibus albis, subglobosis, confertis mutuaque pressione polygonis, 0,7 mm. diam.; tunica exteriore alba, ovi crustæ simili, ab interiore membranacea incolore secedente; capillitio ex nodis calcareis, modo majoribus modo minoribus, albis, angulosis ramosisque constante floccisque connectentibus brevibus; sporis purpureo-brunneis v. griseo-purpureis, spinulosis, 8-10 μ . diam. uno latere conspicue magis spinulosis et saturationibus.

Hab. ad ligna emortua, Colorado, Ohio, Massachusetts, Vermont, Maine Amer. bor.

15. **Physarum virescens** Ditm. — Syll. VII, p. 341 — var. β nitens 6010

List., Mycetoz. p. 59, Torr. Myxom. p. 182. — Peridiis subglobosis, majoribus quam in typo, 0,5-0,8 mm. diam., gregariis v. solitariis, vivide flavis, parum calcigeris; sporis 7-9 μ . diam. — var. γ obscurum Lister, Mycetoz. p. 59, Torr. Myxom. pag. 182. — Peridiis subglobosis discretis, levibus, brunneo-olivaceis, 0,5 mm. diam., sæpe plasmodiocarpicis; sporis 6-8 μ . diam.

Hab. in foliis vel lignis putridis, β in America boreali, γ in Britannia et Hungaria.

16. **Physarum alpinum** G. Lister, Journ. of Bot. 48 (1910) pag. 73, 6011

Ph. virescens var. *alpinum* List., Journ. of Bot. 46 (1908) p. 216. — Peridiis sessilibus, confertis, subglobosis 1-1,3 mm. diam. v. plasmodiocarpia 2-10 mm. longa formantibus, flavo-ochraceis, levibus v. squamulosis; peridii pariete dupli, exteriore calcareo ab interiore facile secedente; capillitii nodulis calcareis crassituberculatis, simplicibus v. ramosis, flavis, floccis firmis hyalinis connexis; sporis globosis purpureo-brunneis, minute verrucosis, 10-15 μ . diam.

Hab. ad folia, gramina in alpinis California, (HARKNESS), Arolla Valesiae (LISTER), Ste. Croix Jura (MEYLAN). — A *Phys. virescenti* probe distinctum.

PHYSARELLA Peck — Syll. VII p. 352.

1. *Physarella lusitanica* Torrend, Myxom. p. 173, t. IX, f. 12. — 6012

Ab affini *Phys. mirabilis* Peck (= *Ph. oblonga* (B. et C.) Morg.) differre videtur peridiis lenticularibus nec breviter cylindraceis, irregulariter dehiscentibus, nec stellatim laciniatis, stipite brevi 0,3-0,5 mm. alto, nec peridio duplo triplove longiore, floccis expansionibus calcareis fusoideis parentibus.

Hab. in cortice et foliis acervatis Eucalypti globuli, Alfeite Lusitanæ. — Peridium 0,4-0,6 mm. lat., 0,2-0,3 mm. cr.

CRATERIUM Trent. — Syll. VII p. 355, XI p. 463, XIV p. 834.

1. *Craterium concinnum* Rex, Proc. Philad. Acad. (1893) pag. 370, 6013

Torr. Myxom. p. 176. — Plasmodio?; peridiis totis 0,5-0,7 mm. alt., subinfundibuliformibus, levibus, brunneo-olivaceis, saepè apice pallidioribus, operculo conspicuo convexo albido dehiscentibus; tunica cartilaginea; stipite 0,1-0,3 mm., atro-brunneo, ruguloso; capillitio ex nodulis calcareis minutis angulosis, granulis brunneo-ochraceis repletis constante; sporis pallide brunneis, tenuiter verrucosis, 9-10 μ . diam.

Hab. in spinis involucri Castaneæ, socio *Lachnobolo globoso*, in America boreali.

2. *Craterium paraguariense* (Speg.) Sacc. et Trott, *Didymium para-* 6014

guayense Speg., F. Guar. I (1883) pag. 141, *Craterium rubescens* Rex, Proc. Philad. Acad. (1893) pag. 370, Macbr., Slime-Moulds p. 75, *Jocraterium paraguayanum* (Speg.) Torr. Myxom. p. 174. — Plasmodio?; peridiis totis 1-1,5 mm. alt., longe cyathiformi-cylindraceis, rectis, gregariis, 0,6 mm. latis, vivide violaceis, vittis vel reticulis pallide violaceis variegatis; stipite cylindraceo, 0,4 mm. alt., 0,7 mm. cr., opace purpureo, ex hypothallo discoideo oriente; tunica cartilaginea, granulis calcareis copiosis, subreticulatim dispositis farcta; columella e nodulis calcareis ad centrum concretis formata; capillitio e nodis calcareis violaceis inter se filamentis violaceo-hyalinis conjunctis; sporis sublevibus, violaceis, 7-9 μ . d.

Hab. ad folia, cortices putres, Paraguay, Amer. austr. et in Amer. bor.

LEOCARPUS Link — Syll. VII p. 358.

1. *Leocarpus fulvus* Macbr., Amer. Slime-Moulds, pag. 82, t. XVI, 6015

f. 4, Torr. Myxom. p. 171, t. VII, f. 7, *Physarum fulcum* List., Mycetoz. II ed., p. 60, t. 66. — Plasmodio flavo; peridiis grega-

riis, ovoideis v. globulosis, rubidis v. pallide flavis, irregulariter dehiscentibus; tunica exteriore plus v. minus calcifera, basi in culpæ formam persistente, tunica interiore tenuissima vix visibili; stipite longo striato, rufo; hypothallo distincto sinuoso, plus vel minus continuo; capillitio copioso pallido v. albo, nodulis calcareis latis flavidis insperso; gleba nigra; sporis atro-brunneis, echinulatis, 13-15 μ . diam.

Hab. in foliis et fragmentis putrescentibus in America bor.

CHONDRIODERMA Rost. — Syll. VII p. 362, X p. 85, XI p. 464, XIV p. 834, XVI p. 822, XVIII p. 210.

1. **Chondrioderma roanense** Rex, Proc. Philad. Acad. (1893) p. 368, 6016

Torr. Myx. p. 167. — Plasmodio?; peridiis sparsis, disciformibus v. leviter convexis, saepe infra umbilicatis, saturate brunneis, 1 mm. diam.; tunica externa levi, fragili, irregulariter fatiscente, interiore alba punctata, stipite curto, nigro-piceo, longitudinaliter sulcato; hypothallo nullo; columella disciformi, pallide ochracea, capillitii floccis paucis subicoloribus, flexuosis, simplicibus v. furcatis, subinde anastomoticis; sporis atro-violaceis, verrucosis, 12-14 μ . diam.

Hab. in lignis putrescentibus in America boreali.

2. **Chondrioderma rugosum** Rex, Proc. Philad. Acad. (1893) p. 369, 6017

Torr. Myx. pag. 168, t. V, f. 26. — Plasmodio cinereo; peridiis sparsis v. aggregatis, 0,5-0,6 mm. diam., albis v. griseis, superficie tota rugulis decussatis et areolas 25-30 polyhedricas formantibus percursa; tunica simplici granulis calcareis plus v. minus referta; stipite subulato, nigrante, peridium subæquante; hypothallo nullo; columella elata, alba, globulosa; capillitii floccis albis v. incoloribus, furcatis v. anastomotico-reticulatis; sporis brunneo-violaceis, 8-10 μ . diam.

Hab. ad Muscos in Amer. bor. et insul. Antillis.

3. **Chondrioderma montanum** Meylan, Bull. Soc. bot. Genève (1910) 6018

p. 262. — Plasmodio?; sporangiis stipitatis, raro sessilibus, albis v. roseis, 1 mm. lat.; peridio duplice; cutis externa fragili, calcaria; cuticula interna membranacea, ab externa separabili; stipite flavo-brunneo 0,5 mm. alto; columella sphærica, magna v. parva, brunnea subinde rufo-brunnea, raro pallida; capillitii tubulis paucis, ramosis, non flexuosis, brunneo-violaceis; sporis globosis, 7-9 μ . diam., brunneo-purpureis, levissime spinulosis.

Hab. ad truncos putres, præsertim fagineos in silvis Jura Helvetica. — Inter *Chondr. radiatum* et *Ch. testaceum* fere medium.

COLLODERMA G. Lister, Journ. of Bot. 48 (1910) pag. 312 (Etym. *colla* gluten et *derma*). — Peridia subglobosa, pariete bistratioso; exteriore gelatinoso, cumulis granuliformibus excreteæ materiei minutisque granulis calcareis consperso; interiore membranaceo. Capillitium e reticulo floccosum anastomotico-ramosorum purpurascens, absque nodulis calcareis constans. Sporæ brunneo-purpureæ.

1. **Calloderma oculatum** (Lippert) G. Lister, l. c., *Didymium oculatum* C. Lipp., Verhandl. k. k. zool. bot. Gesellsch. Wien, XLIV (1894) p. 72, t. IV — Syll. XI, p. 464. 6019

Hab. in ligno putrescente abietino et inter Muscos in Austria (LIPPERT) et Britannia (W. CRAN). — Peridia 0,5-0,7 mm., sessilia v. raro breye pedicellata, olivaceo-brunnea vel purpureo-brunnea; capillitium purpurascenti-brunneolum, extremitatibus hyalinum, basi 2-4 μ. cr.; sporæ spinulosæ 11-13 μ. diam.

PHYSARINA v. Höhn., Stzb. K. Ak. d. Wiss. Wien, CXVIII, Abt. I (1909) p. 431 (Etym. a *Physaro* cui affinis). — Peridia stipitata, membranacea, verrucis calcareis cylindraceis conspersa. Capillitium calce carens, tenuiter filiforme. Stipes in columellam excedentem globosam abiens, granulis calcareis, æque ac columella, refertus. Sporæ violaceæ.

1. **Physarina echinocephala** v. Höhn., l. c. p. 432, cum icon., List., 6020 Myctoz. II ed. pag. 117, t. 198. — Gregaria, circ. 800 μ. alta; capitulo circ. 500 μ. diam., globoso-depresso, theobromino-nigricante, verrucis conspicuis cylindraceo-clavatis, 80-100 × 40-60, roseo-cinereis consperso; stipite albo 400-420 × 200-250, ruguloso-granuloso; floccis radiantibus erecto-ramosis, vix reticulatis, violaceis; sporis globosis sublevibus, atro-violaceis, 8-9 μ. diam.

Hab. in caulinibus putrescentibus, Buitenzorg ins. Javæ.

DIACHÆA Fr. — Syll. VII p. 387, XI p. 465, XIV p. 835.

1. **Diachæa cylindrica** Bilgram, Proc. Ac. Nat. Sc. Philadelphia LVII (1905) p. 524, Torrend Myxom. p. 147. — Plasmodio?; peridiis cylindraceis stipiteque calce parentibus; sporis minutis reticulatis.

Hab. ad fragmenta vegetabilia in America boreali. — Sporis

reticulatis peridiisque cylindricis a ceteris generis speciebus facile dignoscitur.

DIACHÆELLA v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) p. 436 (Etym. *Diachæa*, cui affinis). — Peridia stipitata. Stipes cum columella in peridium intrans, glomerulis crystallinis, majusculis, subrotundis refertus. Peridii membrana tenuis, non fragilis, calce carens; stipitis membrana tenuis, molliuscula, calce non v. vix prædita. Capillitium nodulis calcareis expers. Sporæ violaceæ. — Teste List. Mycetoz. II ed., p. 119 genus non satis validum et a *Diachæa* non separandum.

1. **Diachælla bulbillosa** (Berk. et Br.) v Höhn. l. c. p. 436, f. 34, 6022 *Didymium bulbilosum* B. et Br. — Syll. VII, p. 384 — *Diachæa bulbillosa* Lister in Penzig Myx. Buitenz. (1898) p. 47.

Hab. in foliis siccis, Ceylon, Java. — Stipes opace albus, 400-500 v. 150-200; peridium nigricans e globoso ovoideum 350-400 μ . lat. Capillitii hyphæ reticulato-ramosæ 1-1,5 μ . cr.; sporæ griseo-violaceæ inæqualiter globosæ et irregulariter verrucosæ, 8-8,5 μ . d.

DIDYMIUM Schrad. — Syll. VII p. 375, X p. 85, XI p. 464, XIV p. 835, XVI p. 822, XVIII p. 210.

1. **Didymium Wilczekii** Meyl., Bull. Soc. Vaud. Sc. nat. XLIV (1908) 6023 p. 290. — Plasmodio cinereo, dein saturate cinereo; peridiis albis v. griseolis, semper plasmodiocarpii forma, 1-8 cm. long., 2-8 mm. lat, 0,3-0,5 mm. cr., tunica tenui incolore v. grisea, stellis calcareis majoribus et minoribus v. baculis v. granulis sphæricis (stratum continuum et separabile non formantibus) obducta; capillitio purpureo-brunneo, copioso, floccis verticalibus, valde ramoso-anastomoticois, subinde reticulum fere formantibus, æqualibus, extremitate decoloratis, non acutatis; columella nulla; sporis globosis, 9-12 μ . diam., tenuiter spinulosis, saturate purpureo-brunneis.

Hab. in ramis caulinibusque vetustis Rubi idæi, Urticæ, Ribis, Lonicerae sub nive deliquescente, alt. 1000-1400 m. in Jura Helvetiæ.

2. **Didymium leoninum** B. et Br., Ceyl. Fungi n. 750, p. 83 (1875) 6024 Torrend, Myxom. p. 156. — Plasmodio?; peridiis totis 1-2 mm. alt., subglobosis, infra planis v. umbilicatis, griseis, tunica cartilaginea aurantiaca v. brunneo-aurantiaca, areolata; stipite concolor, firmo, 0,2-0,4 mm. cr., granis calcareis farcto; columella quoque concolor; capillitio copioso, floccis plus v. minus flexuosis, parce ra-

mosis, brunneo-purpureis vel griseis; sporis e griseo rubentibus, minute spinulosis, 8-13 μ . diam.

Hab. ad cortices, Muscos etc. in ins. Ceylon et Java. — Speciem jam dubiam nuperius recognovit cl. Petch.

3. *Didymium squamulosum* (Alb. et Schw.) Fr. — Syll. VII, p. 377 6025
— var. *claviforme* Sturgis, Colorado Coll. Publ. Gen. Ser. n. 30,
(1907), Science ser. XII, n. 1.

Hab. ad ligna etc. putrescentia in Colorado Amer. bor. — Varietas que probabilitate peridio clavato esset dignoscenda, in List. Myc. II ed. omissa est.

SPUMARIA Pers. — Syll. VII p. 388, XVIII p. 211.

1. *Spumaria alba* (Bull.) DC. — Syll. VII, pag. 388. — var. *solida* 6026
Sturgis, Colorado Coll. Publ. Gen. Ser. n. 30 (1907), Science Ser. XII, p. 29, Lister, Myctoz. II ed. p. 138. — Plasmodiocarpis pulvinatis, compactis, 4-5 cm. diam., crystallis calcareis minutis, saepe nodulosis; capillitio parco, irregulari, hyalino; sporis spinulosis, 9-11 μ . diam.

Hab. in foliis, culmis putrescentibus uidis, Colorado Amer. bor.

LEPIDODERMA De Bary — Syll. VII p. 386, XI p. 465.

1. *Lepidoderma Carestianum* Rost. — Syll. VII, p. 387 — var. *flavescens* Meylan, Bull. Soc. Vaud. S. N. XLIV (1908) pag. 292. — Columella et facie interiore tunicae saturate flavis; granulis calcareis griseo-flavidis; sporis 9-11 μ . diam.

Hab. in ramis Rubi idæi, Jura Helvetiæ.

LEPIDODERMOPSIS v. Höhn. Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) p. 438 (Etym. *Lepidoderma*, cui affinis). — Peridia stipitata, membrana rigidula, cartilaginea, glomerulisstellatis calcareis conspersa. Stipes calce expers, subspongiosus, axi firmiore praeditus, apice in columellam globosam granulis calcareis praeditam desinens. Capillitium nodulis calcareis expers. Sporæ violaceæ. — A gen. *Didymio* sensu List. vix distinguendum.

1. *Lepidodermopsis leonina* (B. et Br.) v. Höhn., l. c. fig. 35, *Didymium leoninum* B. et Br., List. Myctoz. II ed. pag. 136, t. 113, *Lepidoderma tigrinum* Rost. p. p. — Syll. VII, p. 386.

Hab. in caulibus emortuis in ins. Ceylon et Java. — Peridium e flavo leoninum, 680 μ . diam. extus glomerulisstellato-spinosis calcareis 40-60 μ . diam. conspersum; stipes 600 \times 200; capillitium

radians vix ramosum, violaceum, ex floccis 1-1,5 μ . cr. formatum; sporæ violaceæ v. violaceo-griseæ, 7-9 μ . diam., ubique minute verruculosæ.

STEMONITES Gled. — Syll. VII p. 397, X p. 87, XI p. 466, XIV p. 836, XVI p. 823, XVIII p. 211.

1. **Stemonites fusca** (Roth) Rost. — Syll. VII, p. 397 — var. β ni- 6029
græscens Rex, Proc. Philad. Acad. (1891) p. 392) (ut sp.), Torr.
Myx. p. 141. — Stipite brevissimo, vix 0,5 mm. longo; peridio
saturatus nigricante; sporis spinulosis v. reticulatis, 8 μ . diam. —
var. γ maxima Schw. N. Am. Fungi p. 260 (ut sp.), Torr. Myx.
p. 140. — Peridiis majusculis, 10-15 μ . long.; sporis atro-viola-
ceis, distincte reticulatis, 5-8 μ . diam.; capillitii areolis 14-50 μ .
diam.; sporis 8-10 μ . diam. — var. δ trechyspora Berk., Torr.
Myx. p. 141. — Sporis 10-12 μ . diam. fortiter reticulatis, costulis
1 μ . alt.

Hab. in truncis et caudicibus putrescentibus: β et γ in America
boreali, δ in Venezuela.

2. **Stemonites pallida** Wing. in Ell. et Ev. N. Am. Fungi n. 3498, 6030
Torr. Myx. p. 144, Macbr. Am. Slime Moulds p. 123, t. XIII,
f. 3 et XVIII, f. 2. — Plasmodio?; peridiis totis 4-6 mm. alt.,
gregariis, rarius cæspitulosis, rectis, cylindricis, obtusis, brunneo-
nigricantibus, rubido-iridescentibus, demum pallidis; stipite brevi,
nigro-nitente, ex hypothallo tenui brunneo-iridescente; columella
abrupte ante peridii apicem evanida; capillitii floccis prope super-
ficiem tenuiter reticulatis, prope apicem rarescentibus; gleba brun-
neo-nigricante; sporis opace brunneis, levibus, sub microscopio
valde augente minutissime parce papillatis, 7,5 μ . diam.

Hab. ad ligna emortua in America boreali.

3. **Stemonites carolinensis** Mac Bride, Slime Moulds, p. 122, t. XIII, 6031
fig. 5 et XVIII, fig. 1. — Peridiis hinc inde cæspitulosis, minutis,
cylindraceis, sursum tenuatis, ferrugineis dein cinereis v. purpu-
rascentibus, stipite nigro-nitente, quartam fungilli partem attin-
gente, levi præditis, hypothallo nigro-brunneo manifesto; colu-
mella nigra sensim tenuata, denique apicem versus evanescente;
capillitio denso, interiore ex ramulis pallidis, laxe anastomoticis
formato, exteriore minute reticulato, areolis 3-15 μ . diam.; sporis
globosis, levibus, 6-7 μ . diam., pallide violaceo-brunneis, coacer-
vatis ferrugineis.

Hab. ad fragmenta vegetabilia, South Carolina et Ohio Amer.

bor. (MORGAN). — Teste cl. Torrend, Les Myx. p. 239, forte eadem ac *Comatr. Persoonii* v. *pulchella*, sed teste Lister Mycetoz. II ed. p. 149 non differt a *Stem. pallida* Wing.

4. **Stemonites flavo-génita** Jahn, in Abhandl. Bot. Ver. Brandb. XIV 6032 (1904) p. 165, Torrend, Myxom. p. 144, *St. ferruginea* Fr., non Ehr. — Plasmodio flavo; peridiis 5-8 mm. alt., ferrugineo-cinnamomeis, cylindricis, utrinque obtusis; stipite nigro brevissimo, 0,5-1,5 mm., columella apicem peridii saepius attingente et tunc dilatato-infundibuliformi; capillitii floccis brunneis v. ferrugineis, nodulis, imprimis introrsum præditis; areolis superficiem versus 6-16 μ . diam.; sporis ferrugineo-pallidis, leniter verrucosis v. subleibus, 8-9 μ . diam.

Hab. ad ligna putrida in Britannia, Germania, Austria, et in America boreali.

5. **Stemonites ferruginea** Ehr., non Fries. — Ita vocanda *Stemonites Smithii* Mac Bride — Syll. XI, p. 466. — A præcedente differt plasmodio albo, peridio stipiteque longioribus, sporis minoribus, 4-6 μ . diam. — Vulgata in Europa, Asia, Amer. et Oceania.
6. **Stemonites virginensis** Rex, Proc. Philad. Acad. (1891) p. 391, 6033 Torr. Myx. p. 141. — A *Stem. fusca*, cui valde affinis, distinguitur teste Torrend peridiis brunneis v. rufis, ex ovali elongatis, capillitii areolis minutis, 5-7 μ . latis, sporisque 5-7 μ . diam., laxe reticulatis, areolis tantum 10-12 μ . diam.

Hab. in lignis emortuis in America boreali. — Teste List. Mycetoz. II ed. p. 158 est *Comatricha typhina* var. *heterospora* Rex.

COMATRICHÆ Preuss — Syll. VII p. 394, X p. 87, XI p. 466, XIV p. 837, XVIII p. 211.

1. **Comatricha lurida** Lister, Mycetoz. (1894) p. 119, t. 15, f. B a-c, Torr. Myx. p. 135. — *Comatrichæ obtusata* forma globulosa et minutie affinis; differt columella peridii medietatem non superante et sursum in ramulos primarios copiosos et validos usque ad apicem peridii partita, extremitatibus liberis vix curvis; sporis verrucosis.
Hab. ad folia emortua in Britannia.
2. **Comatricha rubens** Lister, Mycetoz. (1894) p. 123, t. 45, f. B d-f, 6034 Torr. Myx. p. 138. — Plasmodio albo-hyalino; peridiis totis 1-2 mm. alt., obovato-ellipsoideis vel subglobosis, rectis vel inclinatis, sparsis, 0,3-0,5 mm. lat., brunneo-roseis, tunica sursum fugaci, inferius membranacea et persistente; stipite setaceo, nitide nigro, 0,5-1,5 mm. alt., ex hypothallo brunneo circulari enascente; co-

lumella ad $\frac{1}{s}$ peridii attingente, apice ramosa; capillitii floccis violaceo-brunneis, primariis crassioribus, sursum sensim tenuissimeque angustatis liberisque, floccis inferioribus tunicæ adhærentibus, ibique dilatatis; sporis globosis, echinulatis, 7-8 μ . diam., pallide lilacino-brunneolis.

Hab. ad folia emortua in Britannia et Amer. bor.

3. *Comatricha typhina* (Roth) Rost. — Syll. VII, p. 394 — var. β 6087 *heterospora* Rex, Amer. Slime-Moulds p. 131, Torr. Myx. p. 136. — Peridio fugaci; sporis tenuiter reticulatis nec non prominenter verrucosis. — var. γ *microspora* List. Mycetoz. pag. 121, Torr. Myx. p. 136. — Peridio fugaci; sporis minoribus, 3,5-4,5 μ . d., tenuiter reticulatis nec non prominenter verrucosis.

Hab. β in lignis putridis in Austria et Amer. bor. γ in foliis dejectis in Britannia.

4. *Comatricha irregularis* Rex, Proc. Philad. Acad. (1891) pag. 393, 6088 Torr. Myx. p. 139. — Peridiis congesto-cæspitosis, atro-brunneis v. nigricantibus, semi-erectis v. nutantibus, 4-5 mm. altis, irregulariter cylindricis, variabilibus; stipitatis; stipite nigro distincto peridium subæquante; hypothallo brunneo, nitido; columella centrali, tenui, flexuosa, apicem attingente; capillitio laxo, aperto, floccis arcuatim radiantibus, irregulariter reticulato-connexis, brunneis, extrorsum subhyalinis, areolis latis; gleba nigra; sporis læte brunneis, minute verrucosis, 7-8 μ . diam.

Hab. ad ligna et cortices, New England, Kansas, Texas Amer. bor. — Ab affini *C. longa* statura minore, capillitio magis evoluto apicibus liberis brevioribus et subhyalinis.

LAMPRODERMA Rost. — Syll. VII p. 390, XI p. 465, XIV p. 838.

1. *Lamproderma Lycopodii* (Nees) Raunk., in Bot. Tidsskr. XVII, 6089 pag. 90 (1888), *Cibraria Lycopodii* F. Nees in Fr. S. Myc. III, p. 163, *Stemonites cibrariooides* Fr., I. c. — Syll. VII, p. 399. — Plasmodio?; peridiis sparsis, globulosis, sessilibus, hypothallo violaceo-brunneo insertis, concoloribus, basi persistentibus et limbum laciniatum formantibus; columella cylindrica, peridii medium attingentibus; capillitio e columellæ apice oriundo, violaceo-brunneo, externe sensim ramosiore et dilutiore; sporis brunneo-violaceis, tenuiter reticulatis, 12-18 μ . diam.

Hab. in foliis Lycopodii sp. in Thuringia et Lyc. annotini, Sjælland Dania (RAUNKIAER).

2. *Lamproderma atrosporum* Meylan in Bull. Soc. Vaudoise de S. N., 6040

XLVI (1910) p. 51. — Plasmodio ætate proiecta nigro; peridiis sessilibus v. pedicellatis, 1-3 mm. alt., 1-1,2 mm. diam., globulosis v. oblongis, opace nigris v. parce iridescentibus, tunica fugaci, non membranacea, in areolas minutis disrupente, rarius membranacea et ad basim relaxata; capillitio nigro v. saturate atro-brunneo, numquam violaceo sed forma et divisione ut in *L. violaceo* v. *Carestiae*; columella tenui medietatem superante; sporis nigris fortiter spinoso-papillatis v. ob papillas seriatas reticulatis.

Hab. ad fragmenta vegetabilia ad nives alt. 1100-1500 m. in alpibus Jura Helvetiæ.

LINDBLADIA Fr. — Syll. VII p. 408.

1. *Lindbladia effusa* (Ehrb.) Rost. — Syll. VII, p. 408 — var. *simplex* 6041 Rex, Bot. Gaz. XVII, p. 201 (1892) Torr. Myx. p. 81, t. I, f. I, t. II, f. 1. — Peridiis contiguis sessilibus, interdum liberis et breviter stipitatis, stipite brunneo-nigricanti, ruguloso; granulis plasmodiis quandoque superficialibus et seriatis ut in *Cibraria* spe- cie quadam.

Hab. ad ligna emortua, imprimis Coniferarum in Amer. bor. et Japonia.

CRIBRARIA Schrad. — Syll. VII p. 412, X p. 90, XI p. 467.

1. *Cibraria rubiginosa* Fr. — Syll. VII pag. 417 — var. *longipes* 6042 Meylan, Bull. Soc. Vaud. Sc. nat. XLIV (1908) p. 294. — Pedi- cello usque ad 2 v. 3 mm. alto, plasmodio intense purpureo, in peridia tarde mutato.

Hab. in fragmentis vegetabilibus, Côte aux Fées et Chasseron in Jura Helvetiæ.

2. *Cibraria Bieniaszii* (Racib.) Torr. Myxom. p. 74, *Heterodictyon* 6043 *Bieniaszii* Racib., Hedw. (1889) pag. 121. — A *Cibraria macrocarpa* dignoscitur stipite longiori, 1,5-2,5 mm. alt., calyculi dentibus robustioribus et longioribus conniventibus (ut in *Dictydia*) sporis vivide flavis, levibus 5-7 μ . diam.

Hab. in truncis putrescentibus, Tenczynek Galiciæ occid. (F. BIENIASZ). — Teste List., Mycetoz. II ed. p. 178, hæc species et *Cibr. tatraica* Racib. non satis differunt a *Cibr. macrocarpa*.

3. *Cibraria piriformis* Schrad. — Syll. VII, p. 415. — var. β *maxima* 6044 Torrend, Myxom. p. 77. — Peridiis majoribus, 0,7-1 mm. diam.; nodis variabilibus nunc minutis trigonis ut in *Cibraria tenella*,

nunc majoribus stellatis ut in *Cr. intricata*, stipite robusto. — Var. γ *notabilis* Rex ap. Torrend, Myxom. p. 77. — Peridiis minutis, globulosis 0,3-0,5 mm. diam.; nodis convexis prominentibus, parvis subrotundis v. irregularibus; stipite brevissimo.

Hab. in truncis præsertim Coniferarum; β in Lusitania, γ in America boreali.

4. **Cibraria languescens** Rex, Proc. Philad. Acad. (1891) pag. 394, 6045
Torr. Myx. p. 79. — Plasmodio?; peridiis stipitatis saturate rubris basi violaceo-tinctis, minutissimis, 0,2-0,3 mm. diam., globulosis, nutantibus, solitariis; stipite exili et elato, 2-3 mm., subulato, flexuoso, brunneo-rubido; calyculo concolore nitido, denticulato, granulis pere exiguis radiantibus, 0,3-1 μ . diam., consperso, reticuli areolis triangularibus, nodulis polygoniis munitis, filamentis paucis liberis auctis; gleba saturate rubra, dein expallente; sporis subicoloribus, levibus, 5-6,5 μ . diam.

Hab. ad trunco putres in America boreali.

5. **Cibraria violacea** Rex, Proc. Philad. Acad. (1891) p. 393, Torr. 6046
Myxom. p. 80. — Plasmodio violaceo-nigricanti; peridiis totis 0,5-1 mm. alt., globulosis v. ellipsoideis, minutissimis, vix 0,2 mm. lat., saturate violaceis, metallico-nitentibus, rectis vel nutantibus, stipite 0,3-0,5, mm. alt., violaceo-nigricante, subulato; calyculo crateriformi, membranaceo, cyaneo-violaceo, leviter dentato, minutissime plasmodico-granuloso; reticulo rudimentali, areolis latis et irregularibus nodisque trigonis dilatatis prædicto; gleba pallide violacea; sporis rubescensibus, subverrucosis, 7-8 μ . diam.

Hab. in truncis vetustis Abietis, Tiliæ etc. in Amer. bor. et Britannia. — Peridii tunica interdum persistens et apice tantum per poros 3 4 dehiscens.

6. **Cibraria colossea** Spegazz., An. Mus. Nac. Buenos Aires t. XIX 6047 (1909) pag. 258. — Hypallo latissime effuso, 10-50 mm. diam. plus minusve interrupto, matrice arcte adnato, sordide fusco pelliculo anhisto; stipitibus confertis, erectis, 4-5 mm. long., 60-65 μ . cr. in vivo teretibus, in sicco longitudinaliter rugulosis sæpeque leniter tortis, opacis, basi subnodulosis atque magis infuscatis, sursum lenissime attenuatis apiceque abrupte in peridium expansis; peridiis globulosis, non umbilicatis, 400-500 μ . diam., albidos, cortice squarruloso mox frustulatim evanescente, calice destituto tectis; capillitio ex apice stipitis leniter constricto abrupte exsurgente, floccis a basi liberis v. brevissime connatis, subdichotomice anastomosantibus, nodis eximie triangularibus dilatatis infuscatisque;

sporis pallide ferrugineis 5-7 μ . diam, tenuiter tunicatis, laxe minuteque papillosis.

Hab. ad caudices putrescentes cariosos in silvis prope Formosa, Chaco Argentinæ. — Species eximia *Cr. argillacea* peraffinis sed certe distincta.

RETICULARIA Bull. — Syll. VII p. 418, XI p. 468, XIV p. 838.

1. *Reticularia jurana* Meylan, Bull. Soc. Vaud. S. N. XLIV (1908) 6048 p. 297. — Plasmodio albo v. albo-cinereo, intra 4-5 dies in peridium mutato, vix 1 cm. lat., 3-5 mm. cr., tunica brunneola parum nitente, fragilissima, et maturitate facilime secedente, intus cuprea nitida; pseudocapillitio satis vario, nunc floccis tenuibus hinc inde dilatato-membranaceis, nunc parietibus pertusis (ut *Enteridii*) formato; sporis globosis, 5-6 raro 7 μ . diam., tenuissime reticulatis, vix papillosis, pallide brunneis.

Hab. ad fragmenta vegetabilia, Granges de S-te-Croix alt. 1200 m. et Chasseron m. 1300-1500 in Jura Helvetiæ. — Sporis minoribus et pallidius coloratis a *R. Lycoperdo* videtur differre, sed cf. Lister, Mycetoz. II ed., ut hujus speciei meram formam e loco operio censem.

2. *Reticularia lobata* List., Mycetoz. pag. 161, t. LIX B, *Liceopsis* 6048 *lobata* (List.) Torr. Myx. p. 121, t. IX, f. 15-16. — Plasmodio albo-hyalino; peridiis globosis 0,3-0,8 mm. diam., solitariis v. irregulariter aggregatis, brunneo-ferrugineis v. nigricantibus, nitidis, sessilibus v. vix stipitatis, tunica tenuiter supra fugaci et glebam ferrugineam pulveraceam ostendente; capillitii floccis raris, hyalinis, 2-4 μ . cr., simplicibus v. anastomoticis, axillis dilatatis; sporis dilute ferrugineis, minute saltem pro parte, reticulatis, 6-10 μ . diam.

Hab. ad caudices vetustos in Britannia, Gallia, Lusitania. — Sec auctorem *Enteridio Rozeano* valde affinis.

LYCOGALA Mich. — Syll. VII p. 435, XI p. 470, XIV p. 840, XVI p. 824.

1. ? *Lycogala Torrendii* Bres. in Torr. Myxom. p. 88, t. IX, f. 19-6050 20. — Plasmodio?; peridiis? solitariis v. gregariis, superficialibus e griseo brunneis, subglobosis v. subconicis, 4-6 mm. diam. vel 5-6 mm. alt. et 3-4 mm. lat., interdum ad basim sulcatis et in pseudostipitem tenuatis, leviter pruinosis v. subfloccosis e cute tenuiter dilacerata; gleba dilute rosea; capillitio raro e filamentis

valde tenuibus, paulatim tenuatis, 2 μ . cr., sursum 1 μ . cr., hyalinis, tubulosis, 100-120 μ . long.; sporis ellipsoideis, incoloribus, granulosis 6-7 \times 3.

Hab. ad terram in cistetis arenosis, S. Fiel et Valle de Rosal Lusitanæ. — Dubia stirps et vix myxomycetea; an potius *Cerio-myceti* e. g. *Cer. pusillo* affinis?

2. ? *Lycogala terrestre* Fr., Syst. mycol. III, p. 83, Corda Icones 6051 VI, p. 15, t. II, f. 37, Micheli N. Pl. gen. p. 216, t. 95, f. II, 5. — Cæspitosum, obovatum, supra obtusatum, leve dein furfuraceum, primo cinnabarinum, dein virescenti-fuscum v. olivaceo-rufum; gleba carnea, dein obscure carnea; capillitio ramoso plicato-verrucoso, hinc inde intumescenti, albo; sporis subglobosis ex hyalino flavidis, 7-7,5 μ . diam.

Hab. ad terram lutosam foliis dejectis obiectam in Bohemia et Italia. — Certe nil est nisi var. obovata subterrestris *Lycogalactis epidendri*.

TRICHIA Hall. — Syll. VII p. 438, X p. 93, XI p. 470, XIV p. 839, XVIII p. 212.

1. *Trichia contorta* (Ditm.) Rost. — Syll. VII, p. 444 — var. β in 6052 *conspicua* Torr., Myx. p. 115. — Peridiis minutissimis; elateriis levibus, regulariter cylindricis, saepius sursum inflatis apiceque in acumen breve terminatis; sporis distinctis regularibus. — Var. γ *iowensis* Macbr. Amer. Slime-Moulds p. 211 (ut spec.) t. III, f. 3, t. X, f. 5, Torrend, Myx. pag. 115, t. IV, f. 37. — Elateriis 3 μ . cr. spinulis curvis, saepe 2-3-fidis, 3-6 μ . longis conspersis; sporis 9-11 μ . diam.

Hab. ad ligna et cortices putres, β in Europa et Amer. bor., γ in Amer. bor.

2. *Trichia lutescens* List., Journ. of Bot. XXXII (1897) pag. 216, 6053 Torr., Myxom. pag. 116, *Tr. contorta* γ *lutescens* Lister, Mycetoz. p. 169. — Ab affini *T. contorta* dignoscitur peridiis plerumque globosis, vivide vitellinis, 0,2-0,7 mm. diam., tunica granulis calceis expertise et elateriis semper levibus, magis regularibus, brevissimis et furcatis.

Hab. ad ligna emortua in Britannia, Norvegia, Lusitania.

3. *Trichia pulchella* Rex, Proc. Acad. Philad. 1893, p. 366, Torr., 6054 Myxom. pag. 113. — A persimili *Trichia affini* distingui videtur peridiis magis sparsis, elateribus angustioribus, vix 3-4 μ . cr., sporis

paullo minoribus, 12 μ . diam., reticuli areolis paucis 3-4 in quoque hemisphærio, costulis punctatis.

Hab. in lignis emortuis in America boreali.

4. *Trichia Stuhlmanii* Eichelb., Verh. Naturw. Ver. Hamburg, 3 Flge. 6055 XIV (1906) p. 32. — Plasmodio hemisphærico rubente, 470? μ . d.; stipite primum albo, subdiaphano, dein chalybeo rigidulo, 200 \times 34, apice capitulum globosum aurantio-rubrum, 196 μ . diam. gerente; capillitii floccis e spiriculis 3-4 densissime convolutis formatis, 4 μ . diam.; sporis globosis, flavis, 8,5 μ . diam., tunica fortiter spinulosa.

Hab. in lignis vetustis, Amani Usambara Afric. orient. — Capitulum demum valde ampliatum, usque ad 430 μ . diam. et saturate rubro-brunneum æque ac stipes qui valde breviatur (vix 64 μ . long.). Habitus fungilli junioris fere stilbeus. — Testè Lister, Mycetoz. ed. II, p. 216, non satis differt a *Trichia fallace*.

HEMITRICHIA Rost. (1873), *Hemiarcyria* Rost. (1875) — Syll. VII p. 446, X p. 98, XI p. 471, XIV p. 839, XVIII p. 212.

1. *Hemitrichia Karstenii* (Rost.) Lister, Mycetoz. I ed. p. 228, *He-miarcyria Karstenii* Rost. — Syll. VII, p. 448 — var. *lutescens* Torr., Myx. pag. 106. — Peridiis v. plasmodiocarpis flavo-aureis, granulis calcareis carentibus.

Hab. in cortice Eucalypti, Quercus etc. in Lusitania.

2. *Hemitrichia helvetica* Meylan, in Bull. Soc. Vaud. de S. N. XLVI 6057 (1910) p. 54. — Plasmodio?; peridiis sessilibus, globulosis, aggregatis, flavo-aurantiacis, 0,5-1 mm. diam.; tunica peridii nitida, irregulariter disrumpente, non papillosa nec reticulata; gleba flavo-aurantia v. rubido-ochracea, quam *T. affinis* saturatiore; elateriis 4-5 μ . cr.; extremitatibus plerumque liberis; spiris 4-5 regularibus, confertis, non spinosis; sporis globosis, reticulatis, 11-15 μ . diam., quoque hemisphærio marginulo 0,5-1 μ . cr. ornatis et 2-4 areolas præbentibus.

Hab. ad Muscos in tranco fagineo putri, Chasseron, alt. 1300 m., Jura Helvetia.

3. *Hemitrichia minor* G. List., Journ. of Bot. XLIX (1911) p. 62, 6058 Mycetoz. II ed. p. 225, t. 187. — Plasmodio?; peridiis stipitatis v. sessilibus, sparsis v. per paria approximatis, subglobosis, 0,2-0,4 mm. diam., nitidulis, pallide flavo-fulvis; tunica membranacea, pallide flava, minute papillosa v. plicis tenuissimis curvis signata et grumulosa; stipite cylindraceo, nigro, 0,1-0,2 mm. alt. intus a-

tro-grumuloso; capillitii floccis laxe reticulatis, flacidis, flavidis, 3-4 μ . cr., apicibus liberis paucis v. numerosis, spiriculis 3-4 exiguis, modo levibus, modo spinulis crebris 1-4 μ . longis donatis sœpeque vesiculoso-dilatatis; sporis pallide flavis, minute denseque verruculosis, 9-10 μ . diam.

Hab. ad cortices emortuos inter Hepaticas, Tanabe Kii Japoniæ (K. MINAKATA).

4. *Hemitrichia lejotricha* Lister, Mycetoz. II ed. pag. 224, tab. 172, 6059
Hem. intorta var. *lejotricha* List., Mycetoz. I ed. p. 176. — Plasmudio aquose albo; peridiis stipitatis, raro sessilibus, sparsis, subglobosis, 0,5-0,9 mm. diam., nitidulis, flavidis v. olivaceis, tunica pro more dupli, externa grumulis atro-brunneis referta; interiore diaphana, crescentiis sparsis anulatis v. semilunaribus prædita; capillitii floccis intricato-contortis, parce ramosis, levibus, flavidis, apicibus liberis acuminatis v. obtusis, spiriculis 3-6 donatis; sporis flavis v. olivaceis, minute verrucosis, 9-13 μ . diam.

Hab. in foliis ramisque dejectis in Britannia, Suecia, Germania, Ceylon.

ARCYRIA Hill. — Syll. VII p. 425, X p. 92, XI p. 469, XIV p. 839, XVIII p. 212.

1. *Arcyria ferruginea* Saut. — Syll. VII, p. 431 — var. β *helvetica* 6060
Torr., Myx. p. 98, t. III, f. 14. — A typo differt floccis interdum 3 μ . cr., remote dilatato-nodosis, nodis 1 μ . diam., globulosis vel ovoideis, spinulis vel reticulo præditis; sporis 10-12 μ . diam. — Var. γ *cornuvioides* Rac., Hedw. XXVIII (1889) pag. 123, Torr., Myx. pag. 98. — Gleba brunneo-cinnamomea (non rubescente v. ochracea); capillitio ut in typo; sporis minoribus 6,5-8,5, levibus. — Var. δ *Gabriellæ* Grove, Fauna of Midl. Plateau: Mycetoz. p. 20 in Birmingh. Nat. Hist. and Philosoph. Soc. (1910). — Capillitio speciei sed floccis partis inferioris pallidioribus et tenuioribus, sensim versus partem superiorem crassioribus et saturatioribus spinisque brevibus dense conspersis; peridii interiori parte reticuli areolis rotundis densis prædita, exteriori tenuiter papillosa; sporis tenuiter verrucosis. — Ab affini *Heterotrichia Gabriellæ* recedere videtur colore atro-rubro, nec flavido-brunneo et floccorum libero-rum parcitate.

Hab. ad truncos, caudices emortuos, var. β in Helvetia, γ in Polonia, δ in Britannia.

2. *Arcyria adnata* (Batsch) Rost. — Syll. VII, p. 428. — var. hel- 6061

vetica Meylan, in Bull. Soc. Vaud. S. N. XLVI (1910) p. 55 (*A. incarnata*). — Peridiis globulosis purpureis iridescentibus, pedicello 1 mm. alto præditis, tunica persistenti integra.

Hab. ad Muscos in trunco vetusto fagineo, Chasseron, alt. 1300, Jura Helvetiæ.

3. *Arcyria anulifera* Torr., Myx. pag. 102, Lister, Mycetoz. II ed. 6062 p. 289, t. 185. — Plasmodio?; peridiis sparsis, stipitatis, subglobosis v. ovoideis 0,5-0,6 mm. diam., flavo-fulvallis; tunica membranacea, papillosa, fulva, diu persistente, crassiuscula, ambitu irregulari, deorsum plicata; stipite fulvo, 0,2-0,4 mm. alto, cellulis sporomorphis (?) referto; capillitii floccis reticulatis, flaccidis, flavidis, 1-1,5 μ . cr., hinc inde anulis crebris prominulis, 1 μ . cr. ornatis; floccis basalibus 2 μ . cr., paullo crassius anulatis, submamiliformibus; sporis pallide flavis, sublevibus v. parcissimè verruculosis, 6-7 μ . diam.

Hab. in foliis Pinii Pinastri, Pinhal d' El-Rei, Lusitania. — Teste cl. Torrend ad *Lachnobolus* nutat.

4. *Arcyria glauca* Lister ap. Minakata in Bot. Mag. Tokyo XXII 6063 (1908) p. 322 et Mycetoz. II ed. p. 241, t. 182. — Plasmodio?; peridiis stipitatis, in cæspitulos 4-20 congestis, ovoideis v. cylindraceis 0,4-2,5 mm. alt., 0,4-0,8 mm. lat. pallide glaucis; tunica membranacea, infundibuliformi, subnutante, minute reticulata; stipite pallide viridi v. griseo-brunneo, curvulo, subflaccido, 0,2-0,3 mm. alt., cellulis sporomorphis (?) referto; capillitii floccis reticulatis elasticis, 0,5-3 μ . cr., calyculo adfixis, apicibus liberis paucis spiriculis laxis prominulis, modo levibus, modo spinulosis; sporis pallide glaucis, sublevibus, 7 μ . diam.

Hab. ad ligna emortua præsertim Machili Thunbergii, Kii Japoniae (MINAKATA).

5. *Arcyria stipata* (Schw.) Lister Mycetoz. II ed. p. 243, *Hemiarcyria stipata* (Schw.) Rost., Monogr. App. p. 41, 42, *Leangium stipatum* Schw., Syn. N. Am. Fungi p. 258 (1834), *Hemitrichia stipata* (Schw.) Macbr., Am. Slime-Moulds, p. 204, t. I, f. 8, Torr. Myxom. p. 107, t. III, f. 24-26. — Plasmodio?; peridiis 1,5-2 mm. alt., aggregatis, cylindraceis v. irregularibus, vivide rubido-cupreis vel brunneis, carmineo-inspersis; stipite concolore, cellulis sporomorphis farcto, ex hypothallo membranaceo oriundo; tunica tantum basi persistente, calyculiformi; capillitio concolore ramosissimo reticulum elasticum laxum formante, floccis extremitate liberis et bulbosis, spiralibus parum distinctis, spinulis verrucisque consper-

sis; gleba rubescente; sporis pallide rubellis, 6-8 μ . diam., sublevibus.

Hab. ad ligna emortua in Amer. bor., Anglia, Ceylon. — Ad genus *Hemiarcyriam* nutat.

6. **Arcyria magna** Rex, Proc. Acad. Philad. (1893) pag. 364, Torr., 6065
Myxom. p. 97, — Ab *Arcyria nutante* differt colore cinereo vel
cinereo-fulvo (roseo in var.); calyculo non reticulato, nec papilloso;
stipite longiore, usque ad 1 mm., rubello; floccis evidentius spi-
nulosis.

Hab. ad ligna emortua in Amer. bor. — Var. *rosea* Rex, l. c.

— Peridio roseo. Cum typo

7. **Arcyria occidentalis** (Macbride) Lister, Mycetoz. II ed. pag. 245, 6066
t. 192, *Lachnobolus occidentalis* Macbride, Slime-Moulds p. 188, t. II,
f. 2 et 4 (1899) Torr., Myxom. p. 95, t. III, f. 4-5. — Plasmodio?;
peridiis globulosis v. cylindricis, 0,5-1 mm. diam., solitariis v. gre-
gariis sed non aggregatis, breviter stipitatis, roseis v. incarnatis,
dein brunneo-ochraceis, tunica tenuissima, diaphana, pruinosa, ver-
tice fugaci, basi cupuliformiter persistente; capillitii floccis hinc
constrictis; inde dilatatis, verrucosisque, tunice punctis pluribus
adhærentibus; gleba incarnata; sporis incoloribus, levibus, 7,5-9
 μ . diam.

Hab. ad ligna emortua in America boreali.

8. **Arcyria minor** Schw., Syn. Am. bor. p. 259 (1834) Morgan in Journ. 6067
Cincinn. Soc. H. N. 16 (1893) p. 25, t. I, f. 17. — Peridio ovoi-
deo-oblongo, e rubro brunneo, calycicolo minuto sulcato-granuloso
prædicto; stipite brevi, 0,4-0,7 mm. alt., erecto, brunneo-rubro,
capillitio demum elongato-cylindraceo, usque ad 1,5-3 mm.; floccis
uniformiter 2,3-3 μ . cr., semi-anulis prominentibus serialiter spi-
ralibus donatis; sporis globosis, levibus, 7-9 μ . diam.

Hab. ad ligna et Polyporos putrescentes in America boreali.

— Probabiliter var. *Arc. adnatæ*.

9. **Arcyria lilacina** Quél., Assoc. Franc. Advanc. Sc. XIII (1884) p. 8, 6068
t. VIII, fig. 16. — Peridiis cylindraceis, tenuibus, 1,5 mm. alt.,
valde fugacibus, griseo-lilacinis; stipite brevi, vix 0,5 mm., satu-
rate violaceo nitido e thallo argenteo oriundo; capillitio e reti-
culo granuloso et plicato, griseo-lilacino conflato; sporis sphæricis,
6 μ . diam., tenuissime asperulis, opalinis.

Hab. cæspitosa v. aggregata in lignis putridis, Gironde et Vo-
ges Galliæ (FORQUIGNON). — Affinis *Arcyria cinereæ*.

PERICHÆNA Fr. — Syll. VII p. 420, X p. 91, XI p. 468, XIV p. 839, XVIII p. 213.

1. **Perichæna depressa** Lib. — Syll. VII, p. 420. — var. **quadrata** 6069 (Macbr.) Torr., Myx. p. 92, *Per. quadrata* Macbr., Amer. Slime-Moulds p. 184. — Peridiis rubidis v. brunneis, quadrangularibus, exiguis, vix 0,5 mm. diam.; capillitio raro; sporis dilute flavis, 9-11 μ . diam.

Hab. ad truncos in Pennsylvania, Ohio, Illinois, Missouri Amer. bor.

2. **Perichæna Krupii** Racib., Hedw. XXVIII, p. 124 (1889) Torr., 6070 Myxom. p. 94. — Plasmodio?; peridiis brunneo-avellaneis, saepius vero plasmodiocarpis vermicularibus, 10-15 mm. long., modo anulatim dispositis, interdum globoso-depressis 0,5-1,5 mm. diam., solitariis; tunica simplici minute verrucosa operculo dehiscente, intus tumentiis vesicularibus 2-12 v. 1-3 conspersa; capillitio tunice magna ex parte adhaerente, floccis tenuibus 0,5-1,5 μ . diam., copiosissimis, parce ramosis, levibus v. verrucosis v. minute denticulatis; sporis brunneo-flavidis, tenuiter verrucosis, 7-8,5 μ . diam.

Hab. ad cortices in Polonia. — Species ulterius inquirenda.

3. **Perichæna pulcherrima** Petch, Ann. R. Bot. Gard. Peradeniya IV, Pt. V (1909) p. 305. — Peridiis sphæricis, 0,3 mm. diam. v. oblongis 0,7 mm. long., 0,3 mm. cr., sessilibus in hypothallo irregulari nitente insertis v. sparsis, breviter stipitatis, capitulo globoso 4 mm. diam.; stipitibus interdum connatis et peridia 2 vel 3 ferentibus; membrana nitida purpurea v. rubro-brunnea, dupliqui, exteriori purpurea granulosa, interiori tenui hyalina saepe hexagono-reticulata; stipite 0,3 mm. long. 0,1 mm. diam., striato, brunneo v. rubro-brunneo, intus granuloso; capillitio ex floccis ramosis pallide brunneis irregularibus 4 μ diam. hinc inde inflatis formato et verrucis minutis spinulisque obtusis consperso; sporis globosis 15-17 μ . diam., brunneolis crebre, spinulosis.

Hab. in ramis emortuis *Theobromæ Cacao* et *Erythrina* lithospermæ, Ukuwela, Ceylon.

CORNUVIA Rost. — Syll. VII p. 423, X p. 92.

1. **Cornuvia metallica** (B. et Br.) Rost. — Syll. VII, pag. 423 — 6072 var. **intermedia** Meylan, in Bull. Soc. Vaud. S. N. XLVI (1910) p. 56 (*Margarita*). — Plasmodio primitus albo dein flavo v. roseo demum brunneo; plasmodiocarpis sinuosus 2-15 mm. longis, 0,5-1,5 mm. lat., cupreis, tarde maturescensibus; capillitio bene evo-

luto, modo granuloso, modo levigato et hinc inde anulato-incrassato; sporis granulosis.

Hab. ad caudices vetustos udos, alt. 1000-1300 m., Jura Helvetiæ.

DIANEMA Rex, Proc. Acad. Philad. (1891) p. 397 (Etym. *dia* trans, per et *nema* filum, floccus). — Peridia sessilia v. plasmodiocarpa; tunica membranacea v. cartilaginea. Capillitium ex foccis fere reticis, tenuibus, peridii parti superiori et inferiori affixis formatum.

1. **Dianema Harveyi** Rex, Proc. Philad. Acad. (1891) p. 379, Torr., 6073 Myx. p. 84. — Plasmodio?; peridiis subrotundis v. convexis, 1 mm. diam. v. plasmodiocarpis in ferrum equinum curvatis, sorride rubris v. æneis, tunica membranacea diaphana irregulariter dehiscente; capillitii floccis simplicibus v. apice furcatis, ochraceis, 1,5-2 µ. cr.; gleba ochracea v. lateritia; sporis pallide flavis, e sublevi subechinulatis, liberis, 8-10 µ. diam.

Hab. in lignis emortuis in America bor. et Britannia.

2. **Dianema corticatum** Lister, Mycetoz. p. 205, t. 77 B, (1894) Torr. 6074 Myx. p. 84, t. II, f. 13-15. — Plasmodio roseo; peridiis hemisphæricis, 1 mm. diam. v. plasmodiocarpis elongatis v. subreticulatis, 2-12 mm., castaneo-brunneis; tunica dupliqui, exteriore cartilaginea, olivacea v. ochracea, granulifera, interiore contigua hyalina; capillitii floccis brunneis v. pallidis, nodulosis v. interdum spiriculas 1-3 præbentibus; gleba brunneo-rubida; sporis subicoloribus, uno latere verruculosis, subellipsoideis, 10-12 × 8-9, in glomerulos 4-6 junctis.

Hab. in lignis putridis in Britannia, Scandinavia, Helvetia.

LAMPRODERMOPSIS C. Meylan, in Bull. Soc. Vaud. S. N., XLVI (1910) p. 56 (Etym. *Lamproderma* et *opsis* aspectus). — Peridia sessilia v. pedicellata, globulosa; tunica peridii nitore metallico prædicta, membranacea, persistente; columella nulla. Capillitium ex inferiore peridii parte oriens, floccis ut in *Lamprodermate*. — Absentia columellæ et capillitii originis situ ab hoc genere distinguitur, sed, teste Lister, cum gen. *Dianema* potius congruit.

1. **Lamprodermopsis nivalis** Meylan, l. c. p. 56-57, *Dianema nivale* 6075 List., Mycetoz. II ed. pag. 258. — Plasmodio?; peridiis discretis, sessilibus v. pedicellatis, 1-1,5 mm. diam., globulosis, fulvis, metallicis, stipite concolore usque ad 1 mm. alt., tunica peridii membranacea, levi, basi diu persistente; columella nulla; capillitii floccis

iterato-ramosis, ramis ultimis anastomaticis, permanentibus et spongillæ faciem præbentibus, levibus, subinde undulatis; sporis pallide fulvis, subdiaphanis, minutissime papillosis, 10-12 μ . diam.

Hab. in culmis vetustis Graminearum prope et sub nive pr. Ste-Croix, alt. 1200-1280, Jura Helvetiæ.

LISTERELLA Jahn, Ber. d. Deutsch. Bot. Ges. XXV (1906) p. 540 (Etym. a cl. ARTHURO et GULIELMA LISTER filia, Myxomycetum eximiis monographis). — Peridia in lobos dehiscentia, tunica membranacea, calcifera. Capillitii floccii moniliformiter incrassati. Sporæ pallide umbrinæ.

1. **Listerella paradoxa** Jahn, l. c. p. 540. — Peridiis hemisphæricis, minutissimis 0,2-0,3 mm. diam., nigris, tunica copiose granuloso-calcifera; capillitii floccis tenuissimis, tunicæ parieti interiori adfixis, incrassato-moniliformibus; sporis pallide argillaceo-umbrinis, fere levibus, 7-8 μ . diam.

Hab. in thallo Cladoniæ rangiferinæ in Germania.

Fam. 2. Plasmodiophoraceæ ZOPF. ()*.

TETRAMYXA Göbel — Syll. VII p. 465.

1. **Tetramyxa Triglochinis** Molliard, Bull. Soc. bot. Fr., LVI (1909) p. 23. — Axem inflorescentiæ in formam fusoideam tumefaciens, tumoribus 2,5 mm. cr., 1-1,5 cm. long., flores quoque deformans; sporis intracellularibus e plasmodio ortis, initio in formam tetradicam junctis, 4,5 \times 3, maturitate secedentibus.

Hab. in axe inflorescentiæ Triglochinis palustris in pratis Saint-Nectaire, Puy-de-Dôme Galliæ. — A *Tetr. parasitica* imprimis differt sporis maturitate secedentibus.

LIGNIERA Maire et Tison, in C. R. Acad. Sc. Paris, (1911) 23 Janv. p. 1 (extr.) (Etym. a cl. prof. O. LIGNIER gallico). — In cellulis

(*) De Plasmodiophoraceis et generibus affinibus v. excludendis cfr. doctam revisionem criticam cl. R. MAIRE et ADR. TISON, *La cytologie des Plasmodiophoracées et la classe de Phytomyxinæ*, in Ann. mycol. VII (1909), p. 226-253, cum iconibus.

hospitis immutatis parasitans, nec tumores gignens; schizogonia reducta; sporæ in acervulos valsiformes conjunctæ.

1. **Ligniera radicalis** Maire et Tison, l. c. — Sporis levibus, 4-5 μ . 6078 diam., in acervulos rarius cavos conjunctis.

Hab. in radicibus Callitriches stagnalis in Gallia.

2. **Ligniera Junci** (Schwartz) Maire et Tison, l. c., *Sorosphæra Junci* 6079 Schwartz, in Annals of Bot. XXIV (1910) pag. 236 et 511. — Sporis levibus 5-7 μ . diam. in acervulos saepius cavos conjunctis.

Hab. in radicibus Junci bufonii, obtusiflori, lamprocarpi in Britannia.

3. **Ligniera verrucosa** Maire et Tison, l. c. — Sporis crasse verru- 6080 cosis, 4-5 μ . diam. in acervulos planos conjunctis.

Hab. in radicibus Veronicæ arvensis in Gallia.

SPOROMYXA Léger, C. R. Ac. d. Sc. Paris CXLV (1907) pag. 837 (Etym. *spora* et *myxa* mucus). — Genus endoparasiticum in insectis. Status vegetativus: corpuscula ovoidea vel sphærica 1-nucleata, 8 μ . longa; status reproductivus: myxoamœbæ 2-8 nucleatae sphæricæ, majuscule. Sporæ ex his amœbis schizogoniâ binaria v. plastotomiâ nascentes, ovoideæ, 10-8, tunica jodi et acidi sulphurici ope cyanescente præditæ, plerumque 1-nucleatæ. Sporangia nulla.

1. **Sporomyxa Scauri** Leger, l. c. p. 837. — Characteres generis. 6081

Hab. in organis genitalibus, adipe et sanguine Scauri tristis (Coleopteri) in Algeria. — Hucusque unica forma endozoica inter Myxomycetes. — Genus *Sphaeractinomyxon* Caullery et Mesnil (C. R. Soc. Biol. Paris LVI (1904) p. 408) a quibusdam ad Myxomycetes relatum, est potius Myxosporidiis (animalibus) adscribendum. *Sphaeract. Stolei* Caull. et Mesn. l. c. parasitatur in animalculis Tubificidis ad Cap de la Hague Galliæ.

OPHRYOMYCES Léger et Hesse, C. R. Accad. Sc. Paris tom. 149 (1909) p. 303 (Etym. ex habitu in memoriam revocante schizogregarineam *Ophryocystis*). — Adsunt status vegetativus et sporæ confluendo colonias cupuliformes plus minus elongatas formantes. Sporæ e fusione (*synkryton*) duarum cellularum proximarum orientantur. — Genus omnino dubium.

1. **Ophryomyces Dorci** Léger et Hesse, l. c. — Cellulis vegetativis 6082 globulosis 6-8 μ . diam., matricis epithelio rhizinarum ope adhaerentibus, divisione se multiplicantibus et quasi plasmodia forman-

tibus; sporis maturis ovoideis, 12 × 9, tunica levi, hyalina, resistente præditis, 1-nucleatis.

Hab. in canaliculis Malpighianis Dorci parallelepipedi (Coleopteri) in Gallia.

MYXOMONAS Brzezinski, in Bull. Inst. Ac. Sc. Cracovie (1906) p. 139
(Etym. *myxa* mucus et *Monas*).

1. **Myxomonas Betæ** Brzezinski, l. c. — Auctor describit stirpis sūae 6088 cyclum extensem evolutionis: zoosporas, plasmodia, cystes, zoosporangia, sporas, sed ex inquisitionibus, ut videtur, diligentissimis a cl. Dr. J. Trzebinski editis in Zeitschrift f. Pflanzenkrank. XVII (1908) p. 321, demonstratur Myxomonadem non esse organismum proprium sed tantum formas varias elementorum cellularium e necroscia partium deformatorum.

Hab. in radicibus aliisque partibus Betæ vulgaris var. Rapæ, cui morbos varios afferret in Rossia et verisimiliter in tota Europa; morbi vero qui aliis causis adscribendi sunt.

MYXOBACTERIACEÆ Thaxt. (*)

Syll. XI p. 460, XIV p. 842, XVIII p. 217.

CHONDROMYCES B. et C. — Syll. IV p. 576, XI p. 460, XIV p. 842, XVIII p. 217.

1. **Chondromyces crocatus** B. et C. — Syll. IV, p. 576, XI, p. 461. 6084 — Acervuli 300-600 µ. alt.; cystophora simplicia v. parce ramosa, 15-60 µ. cr.; cystes versiformes, 30 × 10-15 in capitula pedicellata 80-100 µ. diam. junctæ; baculi 2-3 µ. long.

Hab. in fimo, fructibus putridis etc. in Amer. bor. et ins. Java.

2. **Chondromyces aurantiacus** (B. et C.) Thaxt. — Syll. XI, p. 460 6085 — *Stigmatella aurantiaca* B. et C. — Syll. IV, p. 680. — Cy-

(*) Cfr. Synopsis generum et specierum a cl. ALFR. QUEHL exhibitam, titulo *Untersuchungen über die Myxobakterien* in Centralbl. für Bakter. II Abt. XVI (1906) p. 9-31, cum tab. col. et fig.

stophora pro more simplicia, 200-400 μ . longa; cystes e globoso ovoideæ in cystophoro sessiles, 25-50 μ . diam.; baculi 2-3 \approx 0,6.

Hab. in Lichenibus et Fungis putridis, fimo, lignis udis etc. in Amer. bor., ins. Java, Austria.

3. **Chondromyces lichenicola** Thaxt. — Syll. XI, p. 461 (nomen). — 6086
Læte ruber in brunneolum transiens, cystibus globosis, 25-45 μ . diam., partim in substrato sessilibus, partim breviter pedicellatis, non raro pluribus lateraliter fatiscentibus; baculis 2-3 μ . longis.

Hab. in Lichenibus viventibus, quos destruit, in Amer. bor. (THAXTER) et in fimo cuniculino prope Berolinum Germaniae (QUEHL).

4. **Chondromyces serpens** Thaxt. — Syll. XI, pag. 461 (nomen). — 6087
Pallide roseus v. in atro-rubrum nutans, arescendo valde atratus, 1 mm. lat., ex baculorum sacculis intestiniformibus varie inter se contortis formatus; baculis brevibus, 2-3 μ . long.

Hab. in lichenibus corruptis in Amer. bor. (THAXTER) et in fimo cuniculino prope Berolinum Germaniae (QUEHL).

5. **Chondromyces glomeratus** Zederb., Sitzb. k. Ak. d. Wiss. Wien, 6088
CXII Abt. I (1903) p. 477, t. II, fig. 6-20. — Acervulis sessilibus versiformibus, saepe verticaliter oblongis, 2-5 mm. alt., confluendo pulvinato-lobulatis, e roseo purpurascenitibus, subtremelliformibus, ex mucidinea cum bacteriacea symbiotice connexis, teste auctore, constantibus; Mucedinea (*Dendrodochii* sp.?): hyphis septatis, 1,5-3 μ . cr., conidiophora compacta ascendentia gerentibus; conidiophoris pluries dichotomice ramosis; conidiis solitariis vel breviter catenulatis, continuis, e globoso ovoideis, 7-12 μ . long., brunneolis; Bacteriacea: (*Bacillus Chondromycetis-gloemerati* Zederb. l. c.); baculis oblongis utrinque rotundatis, 2 \approx 0,5-1, subinde curvulis, ciliis (?) 4-5 tortuosis exilissimis longis ornatis, materiam roseam labilem secernentibus.

Hab. in truncis fagineis locis udis aliquot, Wienerwald Austriae. — Genesis fungilli iterum inquirenda et confirmanda!

POLYANGIUM Link — Syll. VII p. 47, XIV p. 38 et 844, XVIII p. 219.

1. **Polyangium vitellinum** Link — Syll. VII, p. 47. — *Myxobacter* 6089
aureus Thaxt. — Syll. XI, p. 461 (nomen). — Baculorum cumulis ante maturitatem albis, dein in fragmenta numerosa, globosa, 100-300 μ . diam., mox membrana aurea (cystica) induta secedentibus;

cystibus his 1-8 v. pluribus coloniam 1-4 mm. latam formantibus et diutinus strato subgelatinoso obductis; baculis 1,2-3 \approx 0,4.

Hab. in lignis, corticibus udis jam aqua immersis in Europa et Amer. bor.

2. **Polyangium sorediatum** Thaxt., Bot. Gaz. XXXVII (1904) p. 414, 6090 t. 27, f. 22-24, Quehel l. c. p. 17. — Læte aurantio-rubrum, ambitu circulari, 200-400 μ . diam., intus compactum ex cystibus minutis 6-10 μ . cr., polygonio-applanatis, membrana distincta præditis, baculos 1 μ . long. continentibus, baculis vegetativis 3-5 \approx 0,8.

Hab. in fimo cervino prope Berolinum Germaniæ et in fimo cuniculino in America boreali, rarius. — Ad hoc genus quoque spectat: **Polyangium fuscum** (Schröt.) Thaxt., l. c. p. 414 = *Cystobacter fuscus* Schröt. — Syll. VIII, pag. 1035.

3. **Polyangium compositum** Thaxt., Bot. Gaz. XXXVII (1904) p. 413, 6091 tab. 27, f. 29-30. — Flavido-aurantiacum, subinde arescendo rubrum; acervulis 100-170 μ . diam., ex 4-6 cystibus 75-100 μ . d. subrotundis, mucoso-obvolutis constantibus; cystibus in numerosissimas cystes secundarias, inæqualiter polygonias 10-15 μ . diam. divisis.

Hab. in fimo cuniculino in America boreali.

4. **Polyangium simplex** Thaxt., Bot. Gaz. XXXVII (1904) pag. 414, 6092 *Mycobacter simplex* Thaxt. — Syll. XI, p. 461. — Læte rubescenti-flavum; cystibus tenuiter tunicatis, simplicibus, majusculis, inæqualiter rotundatis, 250-400 μ . diam.; baculis in copiosos minutos glomerulos, intus carneos coalescentibus, 1,2-3 \approx 0,4.

Hab. in lignis et corticibus putridis udis in Amer. bor. et Germania.

5. **Polyangium primigenium** Quehl, Centralbl. f. Bakter. II Abt., XVI 6093 (1906) p. 16. — Rubido-brunneum, siccitate atro-brunneum; acervulis irregulariter rotundatis, grumosis, usque ad 1 mm. diam., discretis intus æqualiter rubentibus, e baculis brevibus, 3-4 μ . longis formatis.

Hab. sat frequens, in excrementis Cuniculi pr. Berolinum in Germania.

MYXOCOCCUS Thaxt. — Syll. XI pag. 480, XIV pag. 843, XVIII p. 318 (*).

(*) Species in Syllog. vol. XX, p. 175, lin. 1-29 perperam citatae sub gen. *Mycobacter* adscribenda sunt gen. *Myxococco*.

1. **Myxococcus rubescens** Thaxt. — Syll. XI, pag. 460 (nomen). — 6094

Acervulis ex albido atro-rubescens, magnitudine valde ludibundis, 100-1000 μ . diam., membrana nulla distincta; baculis vegetativis 4-7 \approx 0,5-0,8; sporis 1-1,2 μ ., initio resistentibus, dein aere udo sensim diffluentibus.

Hab. in lichenibus, charta, fimo, fungis putrescentibus in Amer. bor. et in Germania. — Teste Quehl, *Myxococcus ruber* Baur non satis differt.

2. **Myxococcus ruber** Baur, Arch. f. Protistenkunde V (1905) p. 91- 6095
121. — Acervulis subrotundis, rubris, 0,25-0,50 mm. diam.; sporis peregrinis, globulosis, 0,8-1,3 μ . diam. germinando sensim in formam baculi 4-10 \approx 0,5-0,7 abeuntibus.

Hab. in fimo equino, vaccino, canino etc. in Germania. — Quoad characteres biologicos ex cultura cfr. l. c. ubi de aliis Myxobacteriaceis disseritur.

3. **Myxococcus virescens** Thaxt. — Syll. XI, pag. 461 (nomen). — 6096
Flavus v. flavo-virescens; acervulis globulosis, magnitudine valde variis, 100-1000 μ . diam.; baculis 4-7 μ long.; sporis 1,8-2 μ . d.

Hab. in fimo cuniculino, stercore canino, vulpino, galinaceo in America boreali et prope Berolinum Germaniae.

4. **Myxococcus coralloides** Thaxt. — Syll. XI pag. 461 (nomen). — 6097
Acervulis dilute rubris, minutissimis, 50-200 μ ., copiosis, forma valde ludibundis; massulis coralloideis processibus numerosis, brevibus, rotundatis praeditis; baculis 3-7 μ . longis; sporis 1-1,2 μ . d.

Hab. in lichenibus putrescentibus in Amer. bor. et in fimo putri in Germania.

5. **Myxococcus clavatus** Quehl, Centralbl. f. Bakter. II Abt., XVI 6098
(1906) p. 18. — Pallide rubescens, firmus, erectus, digitiformis v. clavatus, 200-400 μ . alt., supra 150 μ . cr., basi 75 μ . cr., membrana carens; sporis circ. 1 μ . diam.; baculis 3-6 μ . longis.

Hab. in fimo cuniculino frequens, pr. Berolinum Germaniae.

6. **Myxococcus digitatus** Quehl, l. c. p. 18. — Pallide ruber, oblongus, erectus, appendicibus digitiformibus parvis auctus, firmus, 75-150 \approx 25-40; sporis 1-1,2 μ . diam.; baculis 4-7 μ . longis.

Hab. in fimo ab urbe Capite Bonæ-Spei in Germaniam advecto.

7. **Myxococcus javanensis** Kruyff, Centralbl. f. Bakter. II Abt., XIX 6100
(1908) p. 386. — Acervulis rotundis, subinde suboblongis, sessilibus, 70-100 μ . diam., late rubris; sporis rotundis, crassiuscula tunicatis, 1,6 μ . diam., pro more 2-3 catenulato-junctis; bacteriis immobilibus, 6-7 \approx 0,6, bacillaribus, in pseudoplasmodia congregatis.

Hab. in fimo ex stabulo quodam, Buitenzorg insulæ Javæ.

8. *Myxococcus incrustans* Zederbauer in Sitzungsb. k. Ak. d. Wiss. 61 Wien, CXII, Abt. I (1903) p. 474, t. I et II, f. 1-5. — Guttuliformis, pallide roseus, gelatinosus, nitidulus, 1-2 mm. alt. confluendo strata effusa rosea formans, ex fungo hyphomycete cum bacteriaceo symbiotice connexis constans; hyphomycetes (*Torula Myxococci-incrustantis* Zederb. l. c.); hyphis repentibus 3-5 μ . cr., atro-brunneis, levibus, ramulos conidiophoros brevissimos exerentibus; conidiis catenulatis, facile secedentibus, continuis, atro-brunneis, globosis, levibus 4-8 μ . diam.; bacteriacea (*Bacterium Myxococci-incrustantis* Zederb., l. c.); baculis majusculis utrinque rotundatis, 3-4 \times 1,4-1,7, ovoideis, materiam roseam edentibus, in cultura etiam catenulatis.

Hab. in spongia communi gummi arabico imbuta ad glutinandas chartas etc. in Austria. — Genesis et biologia fungilli iterum inquirenda et confirmando.

